

### American Rhododendión Society

Vol. 71 Number 1 Winter 2017



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### 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
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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.



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*R. rufescens.* Photo by Ole Jonny Larsen.

### **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. 59, 2005]

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

Bob MacIntyre Bandon, Oregon



This time of year finds me in the midst of the Annual Holiday Season. I would like to wish all of our ARS members, associates and friends good health, safety and blessings in the New Year to come.

There doesn't seem to be too much to report from the ARS Executive Committee. All systems seem to be working as planned. Ken Webb, Western Regional Vice-President and Committee Chairman for the 2018 ARS Spring Conference in Europe, is up to his eyebrows in work and is doing an excellent job in the planning.

The membership renewal process occurred without any major upsets and seems to be functioning well. I am hoping the expression "No news is good news" is accurate. The number of phone calls, e-mails, letters, etc., has slowed dramatically recently. As I approach the final stretch of my term as President, it is a good feeling to see new processes in place and running smoothly. Many thanks to a wonderful executive team and for all their hard efforts.

The differences in the weather patterns in different sections of the USA does seem confusing. The south and the mid-south appear to be very dry with severe and devastating brush fires. The southeast coast is very dry with mild to moderate temperatures. The west coast and western Canada has gone from the warm dry early summer and early autumn to heavy rain with some flooding. My rainfall for the southern Oregon coast was over 16 inches (40.6 cm). As I am writing this article we have had close to an inch (2.5 cm) of rain today between 7 AM and noon.

I would like to thank all those members who stepped up and volunteered to positions at all chapter, district and ARS levels. You have done a great job and have helped to make things run smoothly at all levels of the organization. I would like to ask everyone who has not yet volunteered to consider where you can help this year. There are many members who had been doing the same job, or rotating between jobs, for many years and are ready for a break. Come to the meetings, enjoy the fellowship and information and consider where you can be of help.

To each and every one, a Happy New Year.

# From the Editor

Glen Jamieson Parksville, BC Canada



know this JARS issue will arrive well after New Year, but Sonja and I nevertheless wish you all the best in 2017! For many of us, it has been an eventful year! From Sonja and myself, we would lke to gve you a Ittle explanaton as to why many ARS members outsde the States have receved their fall JARS issue many months late. As many of you know, we changed our printer last spring, and while the summer issue was produced and mailed out with no problem, there were unforeseen complications with the fall issue. The Clent Servces Manager wth Allen Press explaned t as follows:

"From what we can tell after the fact, our mailing machine, which is the computer set up that generates the addresses to be printed on the mailing labels, unfortunately had some kind of software glitch. We have not been able to recreate the error, and neither has our tech company, which makes it impossible to determine how widespread the problem was."

The problem of incomplete addresses wasn't noticed until mid-November, when no Canadians, including myself, received the Fall JARS. We immediately contacted the pmter, and after confirming the problem, they responded by stating that "we are preparing to go back on press and will resend the entire foreign mailing list, at our own cost." This problem was unfortunate, and we apologize to affected ARS members for the delayed receipt of the fall issue. Hopefully, you will all have received it before this winter issue arrives. If any other members have not received the fall issue, please email Sonja and she will send you one.

Finally, I would like to again thank all the ARS members that voluntarily submit articles and notes to me without reimbursement for inclusion in JARS. Without your knowledge, expertise and interesting stories, JARS would not be the great society journal that it is.



'Stagecoach Surprise'. Photo by Don Wallace.

# Stagecoach Hill – A Treasure Ground of *Rhododendron occidentale*, the Western Azalea

Don Wallace McKinleyville, California



There have been several articles written about *Rhododendron occidentale*, the Western Azalea. In this article I will focus on those on Stagecoach Hill, one of the richest sites for diversity or "sports" among this group of plants. Located just above Highway



Don Wallace with camera and Tim Walsh on Stagecoach Hill.

101 and Big Lagoon in Humboldt County, California, this extensive collection of the Western Azalea is visited by many interested botanists and other enthusiasts, especially in June when in bloom. *R. occidentale* is native to California, Southwestern Oregon and Mexico, and it has been found that areas with the largest concentration of these plants have high concentrations of the mineral serpentine, which can be found on the hill in outcroppings and along the beaches near Stagecoach Hill. The two-mile (3.2 km) long hillside of azaleas was given the name "Stagecoach Hill" because of an old road that stagecoaches used until the early 1900s that went along this ridge. The Western Azalea is a deciduous shrub growing to 15 ft (4.6 m) tall and wide, has lovely fragrant flowers of pink, white and yellow displayed from late May into July, and is often found near streams or wet areas. The fragrance is most potent on warm, still afternoons and is compared to honeysuckle or nutmeg in aroma.

### Going to Stagecoach Hill-Let's take a Hike

If one were to turn off of Highway 101 going east on Kane Road and stay to the left at each junction, you will eventually come to a wide shady area with a sign that says "trail." If we take a hike on this trail, we find it goes through a climax spruce forest that has very little groundcover growing under it. If it were late autumn, there would be many patches of mushrooms to be found but now on this day in mid-June, there is just a thick carpet of spruce needles. Ahead the trail leads west, to a bright area leading out of the forest. As we enter the clearing, we start to see Western Azaleas with their colorful flowers. The plants closest to the forest, due to the lower light levels there, have



R. occidentale Variation 32. Photo by Don Wallace.



R. occidentale Variation 35. Photo by Don Wallace.

the fewest flowers, but sometimes they are unique so we must check them out. The trail continues into a wide expanse of the azaleas in full sun exposure, many shoulder height, but larger clumps are 12–15 ft (3.7–4.6 m) tall. The view is spectacular, with Big Lagoon with some small sailboats and some windsurfers in the foreground and the Pacific Ocean in the background. The day is warm and the air is perfumed by these special plants.

It has been found that *R. occidentale* has 78 chromosomes, while all other American deciduous azaleas only have 26-54, depending on the cultivar. This may be what contributes to this plant having so many variations in foliage and flowers. It is these "sports" that create so much excitement for rhododendron enthusiasts that come here. When one looks across this wide expanse of blooming azaleas, it may appear that they are all the same, but closer inspection shows many differences. Some have almost pure white flowers with a bright yellow flare in the upper lobe, while others have a bright

magenta picotee edge on each white flower with a yellow throat. Some even have frilly edges giving them an exotic flair. To see the flowers best, it is a good idea to wear thick pants, sturdy boots and take heavy leather gloves as sometimes the also present prickly Pacific blackberry (*Rubus ursinus*) vines hold you back from the elusive flowers. You may also want to bring bug repellent as mosquitoes and ticks are common inhabitants in the tall brush.

# **Some flower variations of the Western Azalea found on Stagecoach Hill** (Mossman 1975):

- 1. The flower size is normally two to three inches (5.1–7.6 cm) in diameter, but some are as large as four inches (10.2 cm). The petal shapes narrow to wide and some overlapping. Frilled margins and textures from smooth to crinkled.
- 2. Petal number, or lobes, varies from five to 12.
- 3. Stamen numbers are normally five, but can be as many as 12.



*R. occidentale* Variation 42. Photo by Don Wallace.



R. occidentale SH1. Photo by Don Wallace.

- 4. Flower color: white, cream, pink, deep pink, or red. The colors may be combined in various ways with stripes and spots of one color or another; upper petal color yellow or orange, may be spotty, or splashed, or entire, and may extend to adjacent petals, or, rarely, to all petals. White or pink flowers may have red margins (picotee).
- 5. Flowers per truss: most common is 15–25, but up to 54 have been found.
- 6. Leaf shape and color: quite a variety have been found from very narrow to almost round; color usually green, but often plum-colored or spotted; sometimes bronzy or even variegated.
- 7. Growth habit: Usually upright and spreading, but true dwarfs have been found

#### History

Most texts (e.g., Galle 1987) attribute the discovery of *R. occidentale* to Captain Beechey, who found it on an expedition in 1827 (although some authorities credit David Douglas with the discovery), but it wasn't until 1849 before William Lobb of the famous Veitch Nursery in England introduced the Western Azalea to English horticulture. Later, it was used to develop the famous Ghent and Knaphill strains in England as well as the even more famous Exbury Azalea hybrids that are still propagated

today. It is interesting to note that the plants brought back to England by Lobb were from the mountains of San Diego, CA, and were small and white. What would the Knaphill and Exbury Azaleas have been like if some of the forms from Stagecoach Hill had been used? In the recent past, Dr. Frank Mossman and Britt Smith spent years collecting some of the most unusual forms of this important species, sending many of them to collectors in Britain, New Zealand, Australia, Canada and Japan. Dr. Mossman used some of these sports to create new hybrids for the American market. One such hybrid, 'Washington State Centennial', looks like a much larger flower truss of some of the most colorful forms. It is possible that other hybridizers around the



*R. occidentale* vivid bicolor. Photo by Don Wallace.



'Washington Centennial'. Photo by Don Wallace.

world are using some of these interesting forms of *R. occidentale* to create other fabulous new azaleas (Mossman 1975).

### Distribution and Habitat

Many pockets of *R. occidentale* occurrence are found along the Pacific coast. In Oregon, Coos, Curry, Douglas, Josephine and Jackson Counties have the most colonies and plants and a few are also found in Klamath County. Going south into California, there are a considerable number of colonies in Del Norte, Humboldt, Siskiyou and Shasta Counties in northern California. Sonoma County and the Mt. Tamalpais area in Marin County also have some good stands. Plants are found in the Sierra Nevada Mountains, often at an altitude of 6000 to over 9000 ft (1830 to over 2745 m). Perhaps one of the best known colonies in this area is that in Yosemite National Park



'Yellow Flarel'. Photo by Don Wallace.

where the plants line the banks of the Yosemite River, often to the near exclusion of all other shrubs. Going south from there, there are no reports of any until Riverside County, where a considerable population occurs in the San Jacinto Mountains. Plants have also been found in the highlands of San Diego County that borders Mexico, but these populations are limited to moist areas with springs (Breakey 1960).

*Rhododendron occidentale* grows in acidic soils rich with organic material and ample water. Its often being found near streams or in low wet places tells us that it likes plenty of moisture, and since it is found in areas near the coast that are often foggy, moist air is also desirable. It can be found farther inland at hotter higher elevations, but typically only in wet places. So, the Western Azalea can take quite a bit of heat in summer as long as it is kept moist. Some plants, especially in southern California, tolerate alkaline soils, thus making the Western Azalea a good pick for southern areas with alkaline water and soils.

### Culture

Growing the Western Azalea is fairly easy provided you live in an area that can support other rhododendrons and deciduous azaleas. If you have a moist acid soil high in organic material, you will have great success. The plants grow fairly quickly and need little care, although some pruning over time will result in better looking specimens.



Frank Mossman at Stage Coach Hill.





R. occidentale SM030



R. occidentale SM605a

'Pistil Pete'.

The photos on this page and page 15 were taken by Frank Mossman and Britt Smith and are printed courtesy of *Pacific Horticulture* magazine.

For more information see the *Pacific Horticulture* website at:

http://www.pacifichorticulture.org/articles/ smith-mossman-western-azalea-garden/



'Crescent City Double'. Photo by Britt Smith.



'Frilly Star'.

**Footnote:** The Stagecoach Hill Azalea Reserve will be on one of the tours at the 2017 American Rhododendron Spring Conference in Eureka, California, April  $27^{\text{th}}$  – $30^{\text{th}}$ .

#### References

- Galle, F.C. 1987. *Azaleas*. Timber Press, Portland, OR.: 519 pp.
- Mossman, F. 1975. Western Azaleas of Stagecoach Hill. *Pacific Horticulture* 38(1): pages?
- Breakey, E.P. 1960. Notes on our Western Azalea, *Rhododendron Occidentale. J. American Rhododendron Soc.* 14(3): 127-136.

URL for the Mossman reference: http://www.pacifichorticulture.org/ articles/smith-mossman-westernazalea-garden/

Don Wallace is a member of the Eureka Chapter and owner of the Singing Tree Gardens Nursery.

# **Mole and Gopher Control**

Dick "Red" Cavender Sherwood, Oregon



There are a number of burrowing varmints that can make a mess of our gardens and destroy our plants by their extensive tunneling activities. Two of the most common are moles, *Talpidae*, found in most parts of North America, Asia, and Europe; and pocket gophers, commonly referred to as gophers and characterized by their large cheek pouches, from which the word "pocket" in their name derives, that are burrowing rodents of the *Geomyidae*. About 35 species of gophers live in Central and North America, where they are endemic. While there are several species of each of these varmints, in urban areas moles are by far the biggest problem. I had not been acquainted with gophers until we purchased our acreage in Sherwood, OR, as they are most common in rural agricultural areas.

### A. Moles

While the impacts of the workings of these two small earth movers may be similar, the hills or mounds they create are noticeably different (Figs. 1, 2), an important distinction in determining the proper control of both pests. Mole mounds, though superficially resembling those of pocket gophers, usually are more rounded and symmetrical. The mounds are built up, volcano fashion, by repeated "eruptions" of soil pushed up through the center of the pile. Pocket gophers usually push soil out to one side, resulting in a flattened semicircle or fan-shaped mound with the plugged exit hole at the base of the fan.



Fig. 1. Mole mound.



Fig. 2. Gopher mound.



Fig. 3. Mole (from https://en.wikipedia.org/wiki/.Mole (animal).

Since moles are the most common problem, we will start with them. They can really tear up your flower beds and lawns, which for many of us may be an all too familiar sight.

Moles (Fig. 3) belong to the mammalian order *Insectivora*, the insect eaters. Often, however, they are lumped incorrectly with rodents, which include mice, voles, rats, gophers and squirrels. There are a number of species but all are fairly similar —black to brownish black in color and approximately six to nine inches (15–23 cm) long. They all prefer moist, fertile soils.

Although insectivores, moles also eat other animals such as earthworms and other arthropods, and about 20% of a mole's diet is plant material, including bulbs and root crops such as carrots and potatoes, but individual moles may occasionally feed more heavily on such items. While some plant damage is caused by the mole's eating habits, the primary damage results from their burrowing and mound building activities, which can damage a plant's root system or heave small plants out of the ground. Mice and voles may also use old mole runs to attack plants.



Fig. 4. Mole mounds.

Moles rarely are seen unless captured in traps or killed while burrowing near the surface but mounds of loose soil pushed to the surface indicate their presence. Moles continually excavate new tunnel systems or extend old ones. They dispose of the excess soil by digging a short lateral tunnel to the surface and shoving the soil out on top of the ground. A single mole might create up to 50 to 100 mounds in a month (Fig. 4).



Fig. 5. Mole tunnels.

A mole burrow system (Fig. 5) is a vast network of interconnecting tunnels and passages, varying in depth from three to 30 inches (eight to 76 cm) or more. Moles are active throughout the year and make regular use of the tunnels that are six to ten inches (15–25 cm) deep. During periods of severe cold or extremely dry weather, earthworms can become scarce in the upper soil layers, and moles may then move into their deeper tunnels in search of food. At such times, surface burrowing and mound-building activities become minimal. The number of mounds or ridges in any given area does not always indicate the number of moles present. Persistent and careful use of well-set mole traps usually controls moles and is the best method of control in an urban setting where usually only a few individuals are present.

Gimmicks and gadgets. Nearly everyone has heard of a sure-fire remedy for



Fig. 6. Mole trap expeller.

controlling pest animals, especially moles. These include placing broken bottles, ground glass, razor blades, thorny rose branches, bleaches, various petroleum products, mothballs, sheep dip, common household lye, or even human hair in a burrow. Other prevention devices include mole wheels, windmills, whistling bottles, and electromagnetic devices (Fig. 6) designed to frighten moles away from an area. Another supposed cure-all is planting the so-called "mole plant," or caper or gopher spurge, *Euphorbia lathyris*. (Fig. 7). When planted frequently throughout lawns and flowerbeds, such plants are claimed to serve as living repellents. However, many people are extremely allergic to the sap of all *Euphorbia* and my nursery inspector also complains about it. None of these approaches has proven to be effective in mole impact minimization in controlled scientific studies.

Unfortunately, there are no effective shortcuts in controlling moles. Just as in the control of other pests, achieving success involves knowing something about the target animal's living habits and then using persistent application of effective methods and materials. Mole traps and a recommended poisoned bait, properly placed, are the two most effective methods for controlling moles. However, since poisoned baits may harm pets, using traps is the recommended way of getting rid of moles. It can be very satisfying to pull a trap out of the ground with a dead varmint in it!

Effective mole traps. The mole traps I have found to be most effective are the "Out-of-sight" trap and the "Harpoon Trap" (Fig. 8). Out-of-Sight traps have been around for many years and I recall using them as a child. Out-of-Sight traps are considered "body gripping" and all "body gripping" traps are prohibited in Washington State. To be on the safe side, check your local regulations. There are a number of other types of traps available (Fig. 9) but the problem with them is that two or three are typically required and you have to dig a relatively large hole for them. Harpoon mole traps are sold under the Victor and Sweeney's brand on Amazon.

As shown in Fig. 5, there are two types



Fig. 7. Gopher spurge.



Fig. 8. "Out-of-sight" (left) and Harpoon (right) mole traps.



Fig. 9. Poor mole traps.

of mole burrows, surface feeding runs and deeper permanent runs with a disposal hole. The large mounds or "mole hills" we see in our lawns and gardens are formed when the mole is excavating a deep permanent run. If the mound is in your lawn you really don't want to spread all that soil around so a bucket is handy. Using a shovel, skim off the mound, and then, using either your finger or a stiff wire, probe the area to find the direction of the soil disposal burrow (Fig. 10). Remember that this is just the short disposal run and you will need to find the main run, which should be within about six inches (15 cm). Using your shovel, cut a neat square in the soil (Fig. 11) and remove it to expose the main run (Fig. 12). Note that you should now see a horizontal hole on each side of the dug hole. If you don't, poke around with your finger to find both holes. Now set your trap. For a deep hole like this, "Out-of-Sight Traps" are best. Using the two U-shaped handles, clamp the trap and engage the safety hook. In the center of the hole and between the two tunnels, placing a hard clod of dirt gives you the idea but there is no need to be this fancy. Place the trap in the hole so that the trigger is touching the newly placed clod of dirt (Fig 13) so that the mole has to heave it, and in so doing, it will spring the trap. Be sure to unhook the safety, and then back fill the hole with some of the loose soil to cover most of the trap (Fig. 14). If "body



Fig. 10. Skimming off soild from Mole mound.



Fig. 11. Cut square in center of mole mound.



Fig. 12. Main run of mole mound.

gripping" traps are banned in your area, the Harpoon trap described below could be set in a similar manner.

I usually run my trap line once a day. I seldom leave a trap in a hole for more than three days and will move it to a fresh mound if there is one. If you set the trap correctly, what you will see is a sprung trap holding a mole. Occasionally a mole will dig around the trap and you will come back to find new soil in the hole. When this happens, clean it out, find the two horizontal holes again and replace the trap. Persistence pays off. After you have caught the varmint, replace the plug of sod initially removed. Stomp it down and clean up any excess dirt. About a week later, your grass should have grown enough that you won't see the excavation damage.

In the spring and early summer, you may find a series of sinuous of mounds across the surface of the ground and no obvious mole hill. These surface runs are often located along the edges of sidewalks or where the lawn meets a flower bed (Fig. 15). Surface runs are "feeding" runs and a mole may only use them once. It is often difficult to tell where the main run is. Main runs are often near the edge of a bed and so I use two or three traps in such an area. This situation is where the Harpoon or Plunger trap works well. Feeding runs



Fig. 16. Setting the Harpoon mole trap.

are only an inch or two deep (three to five cm) and out-of-sight traps don't work well in such a shallow run. If you poke your finger in a mound, you can feel the tunnel. Push a short area of the mound down and set your trap as in Fig. 16 with the two long spikes on either side of the run,



Fig. 13. Place trap in mole hole.



Fig. 14. Mole hole back filled.



Fig. 15. Mole run at edge of bed.

the harpoons over the run and the trigger on the tunnel area you compacted. Work the harpoon up and down several times to create a starter hole in the ground, as the trap spring isn't strong enough to penetrate harder soil.

Harpoon traps are easy to see when they have been sprung and you

will often find the mole impaled when you pull the trap out. It may also be necessary to probe around with your finger or trowel to verify that you got your varmint.

Once you have controlled the damage, you will want to monitor the area for mole returns. This is recognized easily because of the presence of new mounds and surface runways. Initiate appropriate control methods as soon as new mounds or surface runways appear.

### **B.** Gophers

Unlike moles, which mostly eat insects and other invertebrates, pocket gophers (Fig. 17) only eat vegetation. Gophers eat roots, bulbs, and other fleshy portions of plants they encounter while digging underground. Gophers also eat the leaves and stems of plants around their tunnel entrances and can pull entire plants into their tunnels. In areas with a snow-pack, gophers will gnaw on bark several feet up a tree or shrub. Because gophers obtain sufficient moisture from their food, they don't need a source of open water (http://wdfw.wa.gov/living/gophers.html).

I once saw an entire pepper plant disappear down a hole. They can consume as much as 60% of their body weight in a day. Gophers can be a huge problem in Christmas tree plantations and can chew all the roots off a six foot (1.8 m) tree.

As opposed to moles which make a "volcano" shaped mound, pocket gophers usually push soil out to one side (Fig.2) resulting in a flattened semicircle or fan-shaped mound with the plugged exit hole at one side of the pile. Note the plugged hole at the base of the fan.

While moles and gophers can be a problem in gardens, in the wild, they are an important species. For example, a typical pocket gopher can move approximately a ton of soil (907 kg) to the surface each year. This enormous achievement reflects the gopher's important ecological function. Their tunnels are built and extended, then gradually fill



Fig. 17. Pocket gopher (from http://.www.uniprot.org/.taxonomy./50723).

up with soil as they are abandoned. The old nests, toilets, and partially filled pantries are buried well below the surface where the buried vegetation and droppings become deep fertilization. The soil thus becomes mellow and porous after being penetrated with burrows. Soil that has been compacted by trampling, grazing, and machinery is particularly benefited by the tunneling process.

In mountainous areas, snowmelt and rainfall are temporarily held in gopher burrows instead of running over the surface, where they are likely to cause soil erosion. Surface mounds created by gophers also bury vegetation deeper and deeper, increasing soil quality over time. In addition, fresh soil in the mounds provides a fresh seedbed for new plants, which may help to increase the variety of plants on a site. Many mammals, large birds, and snakes eat gophers and depend on their activities to create suitable living conditions. Salamanders, toads, and other creatures seeking cool, moist conditions take refuge in unoccupied gopher burrows. Lizards use abandoned gopher burrows for quick escape cover.

The ecological services of pocket gophers, which are substantial, are often not appreciated, particularly when the animals make their presence known by eating garden crops or damaging orchard or ornamental trees. For many homeowners and gardeners, gophers may be only an occasional (or seasonal) nuisance in lawns and garden beds, and not a long-term problem or threat. Where these animals are not so numerous as to be causing heavy damage, they should be considered neutral, but when numerous or causing unacceptable damage, control may be necessary.

The following are suggestions from Washington State biologists (http://wdfw. wa.gov/living/gophers.html) for reducing conflicts. In cases where these methods are not practical, contact your local County Extension Agent or local Fish and Wildlife office for further information.

**Frightening devices and repellents:** Although many devices are commercially available for use to frighten pocket gophers (vibrating stakes, ultrasonic devices, pinwheels, etc.), gophers do not frighten easily. This is probably because of their repeated exposure to noise and vibrations from sprinklers, people and livestock moving about, and lawnmowers and other power equipment. Be skeptical of commercial products and claims, and make sure the manufacturer offers a money-back guarantee if the product proves ineffective.

No repellents currently available will reliably protect lawns or other plantings from pocket gophers. Mothballs, garlic, spearmint leaves, predator urine placed in tunnels are just some of the suggestions. Some recommend a perimeter of mole plant (*Euphorbia lathyris*) or castor bean (*Ricinus communis*), both of which are in the spurge family *Euphorbiaceae*. The sap of all *Euphorbia* is extremely allergenic and castor beans are deadly poison. I strongly discourage the use of either of these plants, especially if children are present. Such control strategies may be experimented with where gophers are an occasional problem, but not a long-term threat.

**Barriers:** Constructing a barrier to keep pocket gophers from tunneling into an area can be labor-intensive and costly. However, this approach is recommended for small areas and areas containing valuable plants. Flowerbeds and nursery beds can be protected by complete underground screening of the sides and bottom. Raised beds with rock or wooden side supports will only require bottom protection (Fig. 18).

Wire baskets can be used to protect the roots of individual trees and shrubs. These can be purchased from nurseries or farm supply centers, or be homemade. Use a double layer of light-gauge wire, such as 1-inch (2.5 cm) mesh chicken wire for trees and shrubs that will need protection only while young. Leave enough room to allow for a few years of root development before the wire rots away.

Groups of bulbs (gophers are reported not to eat daffodil bulbs) and other plants needing long-term protection can be placed in baskets made from ½-inch (1.3 cm) mesh hardware cloth, available from hardware stores and building supply centers.

Large areas, such as vegetable gardens, can be protected using an underground gopher fence (Fig. 19) or a stone-filled trench. However, such a below-ground barrier will only slow the movements of gophers for a time; sooner or later the barrier will be breached since gophers are capable of digging much deeper than 24 inches (61 cm).



Fig. 18. Raised beds can be protected from gopher damage by screening the bottom side with ½-inch (1.3 cm) mesh hardware cloth. (Drawing by Jenifer Rees.)



Fig. 19. A pocket gopher fence should be installed at least 24 inches (61 cm) below ground (or down to the hardpan or bedrock) and 6 inches (15 cm) above ground. Use a 36-inch (91 cm) wide roll of ½-inch (1.3 cm) mesh hardware cloth. Before placing the hardware cloth perpendicularly in the trench, the bottom 6 inches should be bent outward at a 90-degree angle. Alternatively, fill a 10-inch (25 cm) wide by 24-inch (30 cm) deep trench with gravel that is 1 inch (2.5 cm) or more in diameter. Note: Such barriers will likely only work temporarily. (Drawing by Jenifer Rees.)

Neither raised beds or underground barriers are totally effective as gophers do travel above ground when looking for new territory. I have had gophers appear literately out of nowhere. There wasn't a sign of activity within 100 yards (91 m) and all of a sudden new mounds appear.

Several types of barriers (plastic tubes, one gallon (3.8 l) plant containers) are effective at protecting above ground parts of small plants, such as newly planted conifers. Gophers may be deterred from chewing underground sprinkler lines or utility cables by surrounding them with 6-8 inches (15-20 cm) of coarse gravel 1 inch (2.5 cm) or more in diameter.

In situations where gophers are gnawing on water lines or wires, or are burrowing into dams and dikes, search out references for muskrat (*Ondatra zibethicus*) management recommendations.

**Flooding:** Pocket gophers can easily withstand normal garden or home landscape irrigation, but flooding can sometimes be used to force them from their burrows. The entire tunnel system will need to be quickly and completely flooded to evict its tenets. Five-gallon (19 l) buckets of water poured in the hole will flood the area more quickly than a running hose.

Flooding has the greatest chance of succeeding if gophers are invading the property for the first time. Where they are already well established, their systems are too extensive.

For humane reasons, concentrate this effort in late winter and early spring, before gophers give birth. Be careful when attempting to flood out a gopher near a building; doing so could damage the foundation or flood the basement or crawl space.

**Natural control:** A long-term way to help prevent conflicts is a combination of natural and active control. Predators—including snakes, dogs, coyotes, long-tailed weasels, and skunks—kill gophers. In addition, attracting barn owls and other raptors, which prey on young gophers when they disperse, may help control a gopher population, particularly in rural areas. Encouraging these species, or not discouraging them, may help control the gopher population.

Predators alone won't keep a gopher population below the levels that cause problems in gardens and landscaped areas. Before removing every gopher, they will move on to hunt at more profitable locations. However, when combined with the other control techniques described here, natural control can contribute to overall control.

**Trapping:** There are approximately 35 species of pocket gophers native to the Americas where they are endemic. See https://en.wikipedia.org/wiki/Gopher. The ranges of many are limited to just a few counties. Burrowing activity and mounds are fairly similar. For the most part, pocket gophers are not listed as threatened and requiring protection and may be removed or killed without penalty. However, some jurisdictions may have regulations regarding trapping so it is best to check with your local authorities such as the state extension service.

The Washington State is particularly restrictive, as in most of the state live trapping is permitted but not the use of "body gripping traps" that can kill a gopher, even if they were intended to catch a mole!. In the south Puget Sound area of Washington, The Mazama (Western) pocket gopher *(Thomomys mazama)* of Thurston, Pierce, Clark, and Mason Counties is Washington State threatened and the subspecies in Thurston and Pierce counties were listed as Threatened under the U.S. Endangered Species Act in April 2014. Because only remnant populations of these subspecies and species exist, people should not use lethal control in these areas. Elsewhere, pocket gophers are unclassified and may be live trapped. No special trapping permit is necessary for the use of live traps. However, a special trapping permit is required for the use of all traps other than live traps (RCW 77.15.192, 77.15.194; WAC 232-12-142). There are no exceptions for emergencies and no provisions for verbal approval. All special trapping permit applications must be in writing on a form available from the Department of Fish and Wildlife (WDFW) http://wdfw.wa.gov/licensing/trapping/.

If Mazama pocket gophers are to persist in the south Puget Sound area, they will require protection and lands where management is compatible with their needs. In addition, because Mazama gophers occupy grassy areas near homes and private property, a heightened level of tolerance will be required from those people who share their territories. In addition, if gophers are to survive in the suburbs, it may only be because homeowners are willing to keep their cats indoors. The last records of Tacoma pocket gophers, *T. mazama tacomensis*, may have been individuals reported by residents to have been killed by domestic cats.

#### Live Trapping: (http://www.gopherslimited.com/livetrapping.html)

Live traps are a box trap that has a bottom mesh, one mesh end and a door that swings from the inside top down to the closed position. The trap is triggered when the gopher tries to close up the end from the light. Gophers will always plug up a burrow after they are done cleaning out and extending their burrow. This "plug" is usually very obvious in the center of the crescent shaped mound. Once opened, if the burrow is fresh, the gopher will close it. It is kind of like your front door. If you found it opened unexpectedly, you would wonder what happened and close it. The gopher is the same way and "closes" it by packing it full of soil. In this case it has to travel to the end of the box trap to do so. When it gets to the end it pushes on the mesh trigger and the rear door swings shut. When the gopher tries to get back out it closes the door more tightly.

The key to making this all happen quickly is to trap as soon after dawn as possible. That is when gophers are most active and often you will find burrow entrances already open and with very little effort the trap can be placed. Trapping in this period is not only the most productive time but also the time when the gophers ability to survive the trapping is greatest.

Finally, releasing gophers in other areas can cause new problems in an environment or, in the case of suburban release, may even cause a major feud. If you are relocating a gopher be sure it is in an appropriate place. In Washington, outside of the South Puget Sound area where harming gophers is prohibited, live trapping is permitted but "body gripping" traps are not. It is generally permissible to kill the gopher and drowning one in a bucket of water is the easiest way to finish off a gopher caught in a live trap.

There are a couple of other things to consider when handling a live gopher. First, gophers use their teeth like another hand and they will use them to grab on to things, including fingers. The way to handle a wild gopher is to transfer the animal in a way that

doesn't require direct handling. You can also pick a gopher up like a kitten, by the scruff of the neck, and some pick them up by the tail. I have heard of people actually taming a gopher and keeping it like a hamster or guinea pig and if you think about it they are similar. Lastly, gophers cannot survive in a trap for any length of time so the trap must be monitored carefully.

**Lethal Trapping:** There are several types of lethal traps for gophers However, the three in Fig. 20 will work, but poorly.



Fig. 20. Lethal traps for gophers.

The top one is actually probably illegal as it uses a 12-gauge shotgun shell! There are also "Gopher Blasters" (that inject propane and oxygen into the run and that is then ignited by a sparkplug or other ignition device (Fig. 21). This is what I would call the "Caddy Shack" method. As you can see, this causes a lot of flying dirt and if you happen to be standing in the wrong place, you will have a BIGGER problem! Gopher Blasters are best left to professionals.



Fig. 21. "Gopher Blasters" are best left to professionals.

The traps I find most effective are sold under the name of "Cinch" traps and are made here in Oregon (Fig. 22). A similar one is sold under the name "ALEKO CH617." Both are available via the ARS Amazon store. These traps come in several sizes and you will want a couple of the large and medium sizes. Note the flag! It is a big help when trying to locate your traps later. Also note the string and large spike. Coyotes may steal a trap if they can smell the dead gopher.

Occasionally you may find an open hole such as in Fig. 23. If you do, put a trap in it immediately and you may catch the varmint in a couple of hours. However, it is usually necessary to clean out the hole with a trowel to insert the trap. This is where the "Cinch" trap comes into play. Depending on the size of the hole, choose a size that will fit. In smaller holes it may be necessary to actually arm the trap once



Fig. 22. Cinch traps for gophers.



Fig. 23. Trap in open hole.

it is in the hole to make it fit. I back-fill the hole around the trap with loose soil if it was plugged to start with.

Again, I check my traps about once a day and move them if there is a new mound near by. With luck you will find a sprung trap and Mister Gopher in it. If not, keep trying because persistence pays off. Last spring I caught 20 gophers in about a month in our neighbor's field. Very satisfying!

Dick "Red" Cavender is a member of the Portland Chapter.

# Life begins the day you start a garden. Chinese Proverb

# E. White Smith – Tending a Community

Anne Lacy Seattle, Washington



[Editor's note: This article is the fifth submission\* from anonymously funded summer interns whose goals are to provide "oral histories" of prominent member hybridizers, growers, and nursery owners while we still have these folks with us. This concept is really great, as it both honours the significant person discussed and as well gives experience and opportunity to journalism and communications students and graduates to interview and write an article for publication. This submission is from the western

USA, the area where this intern resides. I am encouraged that ARS members are continuing this worthwhile endeavour. \*See online *JARS* 67(3), pp. 28-31; *JARS* 68(2), pp. 5-11; *JARS* 68(4), pp. 5-12;

"So you know what? – It's been a great ride." (May 2010, Vireya Vine #90)

and JARS 70(1), pp. 75-82)]

Ewhite Smith arrived at our meeting . with six pages of printed notes chronicling the kindnesses of his friends in the rhododendron world over five decades. "The only thing that really matters are the people,"



E. White Smith.

he says. E. White (as he is affectionally known) spent 28 years as editor of the *Vireya Vine*, a newsletter singularly devoted to the study and cultivation of tropical rhododendrons called vireyas, section *Schistanthe*. His dedication to the vireya community is clear in the 100 issues he has edited.

White has been a member of the American Rhododendron Society for 56 years. He was President of the Tacoma Chapter from 1972-1974, District Director of District 3 from 1990-1996 and in 1990, he received the ARS Silver Award. He has served on the Executive Committee of the Rhododendron Species Foundation and was a member of the first class of the Master Gardeners program, held in Fife, Washington, in 1972. But growing the plants is what he likes best: "I enjoy doing grounds work, out by myself," he says. "Pruning old rhododendrons and planting new ones."



'Illusion'.



'Lucie Sorensen'.

"What more can a person want out of life other than to understand, "That you Helped, That you Made a Difference."" (March 1994, Vireya Vine #38)

When White was a child in Spokane, WA, his family had a garden dedicated to food production. "I grew up during World War II and we had nothing," White says. "It was really tough. We collected tin foil from gum wrappers off the street. You couldn't get food. You couldn't get gas. People don't understand it now." He thus didn't begin to think of plant growing as a pleasurable or fascinating pursuit until he met the Budil family. White's family moved from Spokane to Tacoma, WA, when he was a teenager and there, he met Marlene Budil while they were both students at Stadium High School. After graduating, they married, and eventually had three children.

Marlene's Elwood parents, and Neta, ran Budil's Flowers on Sixth Avenue in Tacoma. The first meeting of the Tacoma Chapter of the ARS was held in the Budil's living room. "They rhododendron people," were White says. "[Elwood] worked in the shipyards building escort carriers in Commencement Bay during World War II and he would bring home his Model A Ford with a rumble seat full of sawdust every night after work and put [the sawdust] in the ground and dig it in. He had great ground." The Budils brought White into the rhododendron world, and he joined the American Rhododendron Society in 1960.

White and Marlene both



R. christi.



R. leucogigas.

worked at Budil's Flowers, and he spent thirteen years in the Washington National Guard, achieving the rank of Master Sergeant. At age 27, he joined the Metropolitan Park District of Tacoma, beginning 30 years of service. "Started at the very bottom mowing paths at Wright Park in downtown Tacoma and ended up two or three from the top," White recalls. He smiles when remembering the exciting events he helped make possible, including a world softball tournament, but he's proudest of the relationships he built. "I can still go back to the lunchrooms and see the different crews, walk in at noon and sit down, say howdy and talk to the guys. That's a good feeling." White retired in 1993, to care for Marlene after she developed Alzheimer's disease.

"I love doing the Vine and corresponding with you people from all over the world." (July 1991, Vireya Vine #29)

In 1985 with *Vireya Vine* #5, White became editor of the *Vireya Vine*, a publication of the Education Committee of the Rhododendron Species Foundation, while Fran



R. phaeochitum.

Rutherford handled the mailing. The *Vireya Vine* was the place for those who grew and loved vireyas to share information and build a community. The quarterly newsletter was largely comprised of articles and letters submitted by readers. In the early years, White had the slow job of typing up the newsletters in WordStar on a Kaypro II computer. "Once I started the spelling checker on that thing you could go upstairs, have a cup of coffee, read a book for a while, go back down and it was half done," he says.

He continued to edit the newsletter for nearly three decades. When asked how he sourced letters and articles for so many issues he laughs. "We knew a lot of the people and word gets around in plant societies and groups." Many of the letters discussed the difficulty of getting vireyas, native to Southeast Asia, to thrive in North America and Europe. The newsletter was a place for enthusiasts to ask for help and share success stories. When he was short on letters, White wrote of his own experiences with vireya growing and hybridizing, or about meeting other vireya enthusiasts. An archive of the first 92 *Vireya Vine* issues is maintained at the website www.vireya.net.

In addition to the *Vireya Vine*, White has edited two books about vireya rhododendrons. The first was a collection of letters and articles that appeared in the *Vireya Vine* from 1982-1990. The second was an anthology of articles from the *Journal of the American Rhododendron Society* from 1954-1998, edited in collaboration with his second wife, Lucie Sorensen, of Bovee's Nursery in Portland, Oregon.

"The love of great plants is the love to share."

(November 2011, Vireya Vine #95)

White often went on "highway plant hunting trips" along the west coast, and the *Vireya Vine* has many reports of the greenhouses of vireya-loving friends he visited along the way. In 1972, White and his father-in-law, Elwood Budil, traveled to the Himalayan state of Sikkim to collect rhododendron seeds. An independent monarchy at the time of White's visit, Sikkim was annexed by India in 1975. "Twenty-six of us from the Northwest went hunting rhododendrons," White says. "There's a whole bunch of native species that live there. It was a great trip. Early in the morning, I saw Mount Everest before it clouded over. Stayed in a dak bungalow at 11,500 feet (3505 m). Everybody else was sick from altitude sickness, but I'd already had altitude sickness a week before, so it didn't bother me so bad. Plant hunting in the wild is hard work. Almost no roads, you've got to carry everything with you, but we brought back mounds of seed. I've still got one plant [from that collection] growing."

A few years later, he visited New Zealand and Australia to attend the Pacific Rhododendron Conference. He spoke in Melbourne and consulted with members of the Australian Rhododendron Society about the irrigation systems in their gardens. "I was a parks guy," he says with a laugh. "We knew how to do irrigation. We did it all the time."

White returned to Australia and New Zealand in the 1990s with Lucie, bringing back vireya seeds and cuttings which White says account, in part, for the outstanding collection of vireyas they amassed at Bovee's Nursery, at one time totaling over 135 species and 600 hybrids.

"You have nothing to lose, so try. And then tell the Vireya Vine what

you tried because life is just a learning experience."

> (November 2010, Vireya Vine #92)

White finds a lot to love in vireyas. "They're very rare," he says. "Almost nobody grows them either because they can't or they don't know about them. They're a completely different group of rhododendrons—they will not cross with [members of] the rest



R. stenophyllum.


#### R. radians.

of the rhododendron family. They're really easy to propagate from cuttings. You don't have to grow them from seed. And they're reasonably hard to come by if you're collecting them."

After more than 55 years spent thinking about and living with rhododendrons, White is still a passionate plant lover. He's excited about the future of the Rutherford Conservatory for tropical rhododendrons at the Rhododendron Species Foundation and Botanical Garden in Federal Way, WA. The conservatory is named in memory of Fran Rutherford, White's friend and longtime collaborator on the *Vireya Vine*. "I was there the day we unloaded the first bunch of plants when they came up from Salem, Oregon," he says. "It's going to have the biggest collection of tropical rhododendrons in the world."

In addition to the good people he has known, a lifelong interest in learning has kept White engaged and growing all these years. "The study of them goes on for the rest of your life," he says. "You can never learn it all. I was going out this spring to the Species Foundation to help out in their sales area and I picked up a new species that I'd never heard of before. I brought it home and now it's planted on my back porch. Then you get out the species book and look it up and learn about it. That's great fun."

Anne Lacy holds a Master of Fine Arts from American University, where she received the Myra Sklarew Award in Prose. Her work has appeared in The Golden Key, Lady Churchill's Rosebud Wristlet, Connections, and Crazyhorse.

## How to Check a Thermometer's Accuracy

Marc Colombel Fouesnant, France

The heating of most propagation units is regulated by a an electrical plug thermostat, except for my cuttings being rooted in an aquarium with its own thermostatically-controlled heater (http://www.rhododendron.fr/dos\_59/dos59\_e0.htm).

Thermostats today are digital. They consists of a probe connected by a connecting cable to a more or less sophisticated dial. However, a check of the probe's recording accuracy is required when purchasing a new thermostat or after a stoppage in the heating. If the probe is measuring temperature inaccurately, the temperature you have programmed will be off by just as much as the inaccuracy, and this can be detrimental for both the cuttings and your wallet.

How best to calibrate this probe? Possibly with another thermometer, but then how to be sure that thermometer is itself reliable.

An alternative is that another reliable thermometer exists, and that is you, or at least me, as in the photo..

Insert the probe into your mouth and verify that it is stabilized at  $37^{\circ}$  C. (98.6° F). If the temperature is not  $37^{\circ}$  C, then either your probe is unreliable, or you might consider seeing your doctor, you may be sick.



Marc Colombel is a member of the Scottish Chapter.

Author Marc Colombel checks the accuracy of his thermometer by inserting the probe into his mouth.

## Drought Tolerance in Rhododendrons

M.J. Harvey Victoria, BC, Canada

(Modified from the 2003 Victoria Rhododendron Society Newsletter, later reprinted in the May 2016 Newsletter)

[Editor's note: I am publishing this article as it points out an interesting fact. Virtually all rhodo hybridizing is being directed towards developing interesting flowers, plant foliage characteristics or temperature tolerance to either hot or cold conditions, with little being directed towards tolerating droughts. This article suggests there may be opportunity here, which I hope may inspire hybridizers, as in many areas minimizing water demand in gardening is becoming increasingly important.]

It is unfortunate that rhododendrons in Victoria, British Columbia, have come to be associated with intensive watering. This is partly due to the enterprise of our local landscapers and equipment suppliers, as shown by this imaginary conversation: **Gardener**, "Does my garden need an automated system?" **Landscaper**, "It is the best thing you could possibly have; we will install one next week." There is a wise saying, "never ask a barber whether you need a haircut." The answer is always yes!

The above was going on when many western cities in the USA were running short of water and were actively promoting xeriscaping. They wanted to persuade homeowners to give up their water-sucking lawns and flowerbeds and install rock-mulch and drought-resistant plants. However, the case for xeriscaping never got a fair hearing in Victoria, BC—no one [years ago] could see a profit in it.

In the wild, rhododendron species grow in a wide range of climatic conditions. The great centre of species diversity in the Himalayas has a monsoonal climate where rain sheets down in the summer, but with cooler dryer winters. Away from this region there are fewer rhododendron species but they are adapted to various climates, most with a greater or lesser degree of summer drought. A local example here on Vancouver Island is with *R. macrophyllum*, distributed from British Columbia to California, perfectly adapted to survive a long summer drought. However, personally I have found it difficult to grow. Don't water young plants and they die, water them too much and they die.

By happenstance, in the 1990s, I conducted a long-term experiment on drought resistance in rhododendron hybrids. I had no intention of doing such a thing, it just happened, so let me explain.

When I came to Victoria, actually Sooke, BC, in 1990, I brought many hundreds of seedlings resulting from hybrids I had made during the previous few years in Nova Scotia. I planted out these seedlings in rows in a large, flat field with the intention of eventually picking out the best.

For the next few years I would put sprinklers on the field during dry spells but as the seedling area grew larger and pressure from other work (on grasses) mounted, I stopped watering, allowing the exposed field to dry out completely in the summer.

The soil was a deep, fine sand, low in clay components and with little water-



*R. smirnowii.* Photo by Hank Helm from Hirsutum.

storage capacity. In some summers, with only a few millimeters (fractions of an inch) of rain from June to September, the capacity of the plants to survive drought in full sun was severely tested.

The results? Most of my seedlings died. Considering the magnitude of the water stress and years of sheer neglect this was not surprising. What is interesting is what survived. Looking at the parentage of the remaining plants, it became apparent that the nature of their parental genes had a strong influence on which survived.

The survivors were:

R. smirnowii  $\times$  R. pachysanthum R. pseudochrysanthum  $\times$  R. degronianum subsp. yakushimanum R. maximum  $\times$  R. ungernii

I should point out that I had not used *R. macrophyllum* in my crosses but I suspect that its hybrids would have been among the survivors had I done so.

What is interesting about the above list is where the parents come from and the climates in which they grow. Not one is from the monsoonal centre of rhododendron diversity in southeast Asia. They are all from peripheral regions with some degree of summer drought.

#### R. smirnowii and R. ungernii

*R. smirnowii* and *R. ungernii* are both from the slopes of the southern Caucasus Mountains and both were discovered in 1885 by Baron Franz Ungern-Sternberg (1808-1885), a Baltic-German botanist and physician. One of the species was named for the Baron and one for a friend. I might mention that my wife Linda and I have visited

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the Georgian Republic (when it was part of the USSR) and seen the understorey of *R. ungernii* in the foothills growing under an open canopy of magnificent Carpathian beech (*Fagus* spp.) with towering straight trunks. The southern Caucasus have a fairly mild climate with some summer drought periods.



*R. ungernii.* Photo by Everard Daniel from Hirsutum.

## *R. pachysanthum* and *R. pseudochrysanthum*

*R. pachysanthum* and *R. pseudochrysanthum* are both from Taiwan, not the frost-free sub-tropical margins of the island but at certain zones in the mountains where it can freeze in winter and yet get quite warm and dry in the summer.

## *R. degronianum* subsp. *yakushima-num*

*R. degronianum* subsp. *yakushimanum* is not too far away on the island of Yaku at the southern tip of the Japanese chain, where it grows exposed to sun and wind near the mountain top.



*R. pachysanthum.* Photo by Jens Birck from Hirsutum.



*R. pseudochrysanthm.* Photo by Coen Zonneveld from Hirsutum.



*R. maximum.* Photo by Coen Zonneveld from Hirsutum.



*R. degronianum* subsp. *yakushimanum*. Photo by Garth Wedemire from Hirsutum.

#### R. maximum

The remaining species, *R. maximum*, is from yet another continent. It occurs along the Appalachians in eastern USA where it can get summer storm rain but otherwise where it can get stinking hot and dry as I have experienced. The particular cultivar used to make the hybrid was the Mt. Mitchell red-leaved form, although this does not show in the offspring, or at least not yet.

So, in summary, all the surviving hybrids in the field have parents with some degree of natural drought resistance. This seems to have combined in various ways to produce exceptionally drought- tolerant offspring. As I said earlier it was not my intention to research drought tolerance but the results are so striking that I thought it worth documenting.

Joe Harvey is a member of the Victoria Chapter, and a prolific contributor to the Victoria Chapter's newsletter.

In the spring, at the end of the day, you should smell like dirt. Margaret Atwood

# $S^{ociety News}$

### Awards

#### MASON DIXON CHAPTER

The Mason Dixon Chapter celebrated its 35<sup>th</sup> anniversary with a luncheon and used the occasion to make awards recognizing the contributions of a number of members. The chapter awards a Certificate of Appreciation as well as the Bronze Medal. The certificates were given to Linda Golembieski, Tom Manger, Louise Teubner and Susan Lord. The certificates read:

Because of your recognizing responsibilities as a member, volunteering in various roles, supporting chapter functions, participating in behind the scene capacity, and enriching the chapter and the ARS with interest and enthusiasm, we are here today celebrating the 35<sup>th</sup> Anniversary of the Mason Dixon Chapter. Some of these tasks are visible and some obscure—some big, some small. In any case we want you to know that your contribution is valued. That is why the Mason Dixon Chapter is pleased to award you this Certificate of Appreciation.

#### Bronze Medal: Joan and Paul Netherwood

In 2009 we recognized your contribution to chapter life with our Certificate of Appreciation. Today on the occasion of our 35<sup>th</sup> anniversary we award you our highest honor the Bronze Medal for your continued contribution and participation in chapter projects and activities. You became members in 1996 and were originators of our annual chapter picnic event and organized garden tours for many years. You have helped organize entries in our flower shows, manned our exhibit at the Timonium Home and Garden Show and worked at other special events. It is with great pleasure that we recognize you with our Bronze Medal.

#### Bronze Medal: Pat and Ed Kelly

On the occasion of the Mason Dixon Chapter's 35<sup>th</sup> Anniversary we wish to recognize your many activities that contribute to chapter life. Among these activities you have helped in establishing the native plant garden at Bear Branch, worked at the annual meeting in Williamsburg and willingly opened your garden for chapter picnics and tours. In addition you, Pat, served as editor of our newsletter for many years. For your enhancement of chapter life, we award you our highest award, the Bronze Medal.

#### **Bronze Medal: Frank Duff**

On the occasion of the Mason Dixon Chapter's 35<sup>th</sup> Anniversary we wish to recognize you, Frank, for your contribution to Chapter life. You have become an integral part and willing worker for Mason Dixon serving as chapter vice-president, chair of our flower show and program chair. In addition you have manned the chapter's booth at the Timonium Home and Garden Show and hosted an annual chapter picnic. It is with great pleasure that we award you with this Bronze Medal, our highest award

**C**ociety News

#### Awards continued

#### MOUNT ARROWSMITH CHAPTER Bronze Medal: Linda Derkach

Since she joined MARS many years ago, Linda has been involved. In June 2016, MARS members were pleased to present her with the bronze medal for her efforts. It read: Linda has been a willing and energetic volunteer for MARS, wearing many hats over the years. She has enthusiastically served two terms as President, and that enthusiasm has encouraged others. She has edited the newsletter, contributing articles and photographs, made presentations to monthly meetings and moderated panel discussions. She has served as chair of the annual Garden Tour and is involved in the necessary committee work. With enthusiasm and energy Linda managed to revive the moribund bus tour resulting in successful visits to out-of-town gardens. She has also hosted many pot luck events. It is with great pleasure we recognize this exceptional contribution to MARS with the chapter's highest honor, the Bronze Medal.

#### POTOMAC VALLEY CHAPTER Bronze Medal: Richard and Ginny Mohr

Richard and Ginny Mohr have been outstanding leaders in the Potomac Valley Chapter for many years. Richard served as Vice-President and then President while Ginny was his able assistant. Now she has assumed the role of Vice-President, and he helps with her responsibilities. The Mohrs have been longtime members of our Executive Planning Committee, and were instrumental in seeing that so many activities ran smoothly. They made arrangements for meetings, picnics, and banquets. They have helped coordinate many details including room setup, refreshments, and purchase of picnic supplies. They have assisted with flower shows, plant sales, and field trips. The Mohrs have graciously opened their lovely home and garden for committee meetings, overnight guests, garden tours, and the chapter picnic. On behalf of our appreciative membership, we are pleased to award them the highest honor our chapter can bestow, the ARS Bronze Medal

#### Bronze Medal: Bob and Rosa McWhorter

Bob and Rosa McWhorter have been two of our most active chapter leaders. Bob has served as Chapter Vice President and President multiple times, and they continue to serve on our Executive Planning Committee. They maintain an exquisite garden in Gambrills, Maryland, and open it regularly to our members and to the public. They established our popular chapter photography contest, and have inspired us with images of their flowers and gardens they have visited in presentations. Bob and Rosa have helped coordinate many activities including plant sales, flower shows, field trips, and cutting exchanges. They have raised plants for our chapter and made crosses for the seed exchange. Bob sounded the alarm about a new destructive insect pest in the region, the Asian Ambrosia Beetle. For the continuing leadership and guidance they provide to our organization, the Potomac Valley Chapter presents its highest award, the ARS Bronze Medal.

**P**ocíety News

#### Agate Beach Inn, Newport, Oregon Friday, September 30, 2016 at 9:00 am

#### **Brief Summary of Minutes** 1. Nominating Committee Report – Bruce Feller

**Motion:** Moved by Bruce Feller and seconded by Anne Gross that Steve Krebs be nominated as Eastern Vice-president effective April 2017. **Carried** 

#### 2. Report of the Bylaws and Policies Committee – Gordon Wylie

During the morning, we discussed amendments to the ARS Bylaws and Policies which had been previously circulated. A number of amendments were approved to bring the bylaws and policies in line with the new administrative structure of the ARS. Changes were approved to the sections pertaining to the position of Executive Director, creating a new section entitled Office Administrator. The section on the role and duties of the Treasurer was also amended.

Essentially, the duties of the former Executive Director position have been dispersed among the recently appointed Office Administrator, the Treasurer and the Assistant Editor of JARS. A copy of all amendments can be found in the updated ARS Bylaws and Policies on the ARS Website.

Gordon Wylie announced that he and Bud Gehnrich, co-chairs of the Bylaws and Policies Committee will be resigning from the committee at the ARS 2017 Convention in Eureka, California.

#### 3. Digital JARS

A motion was brought forward by Chris Hodgson of District 1 that the ARS consider offering a reduction of \$5.00 in the membership fee for members requesting to receive the digital JARS only. This issue was referred to the Budget and Finance Committee and may be brought forward at the spring convention in accordance with ARS POB 2.2.1.

Concern was expressed that this change might reduce revenue to the society, and that few members would actually take advantage of it. It may also eventually reduce costs of producing JARS in the future.

#### 4. Treasurer's Report

Dave Banks gave a quick review of our financial situation which is looking much better, with further improvements anticipated next year.

A motion that would allow renewal of memberships online by all members was approved.

A motion to expand the duties of District Directors to include direct support to chapter membership chairs and treasurers was approved.

Dave presented an analysis of membership retention in all chapters and districts, and suggested that we can learn from chapters that have increased membership over

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# $S^{ m ociety\ News}$

#### **ARS Board of Directors Meeting continued**

the past several years. Information is available on the ARS Website to assist chapters to retain and increase membership.

#### 5. ARS 2019 Convention - Philadelphia

Steve Henning announced that the venue for this convention will be the Desmond Hotel in Malvern, Pennsylvania near the Jenkins Arboretum and Valley Forge.

#### 6. ARS Store

ARS members are reminded to go through the ARS Store when purchasing from Amazon.

#### 7. Digital Publications

Bob Weissman suggested we check out the Virginia Tech Archives for past issues of JARS.

#### 8. Coalition of American Plant Societies

Our representative to CAPS, Bill Meyers presented a very comprehensive and informative report on the recent meeting he attended. It is well worth reading by Chapter Presidents and Membership Chairs. Key to retaining and increasing membership includes:

- publicity
- partnerships
- a presence on the internet, Facebook, Twitter, Instagram
- be positive, persistent and upbeat.

The American Rose Society has tried such things as free trial memberships, multi-year memberships with a discount, reaching out to teenagers - all with great success.

Submitted by Linda Derkach ARS Secretary

### **Rhododendron Calendar**

- **2017** ARS Annual Convention, Eureka, California. Board Meeting. April 27–30.
- **2018** ARS Annual Convention, Germany (decision pending)
- **2019** ARS Annual Convention, Philadelphia, Pennsylvania. Board Meeting. Dates to be announced.
- **2020** ARS 75th Anniversary Convention, Portland, Oregon. Board Meeting. Dates to be announced.

# Society News

### **Election of District Directors**

In accordance with Article IX, Section E, of the Bylaws, the chapter presidents in ARS Districts 3, 6, 11 and 12 are to serve as their Disticts' nominating committees for District Directors and Alternates for a 3-year term beginning in 2017 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 3**

District Director - no nominee District Director Alternate - no nominee

#### **DISTRICT 6**

District Director - C. J. Patterson (carried over from previous term) District Director Alternate - Barbara Gingras (carried over from previous term)

#### **DISTRICT 11**

District Director - John Golab (carried over from previous term) District Director Alternate - no nominee

#### **DISTRICT 12**

District Director - Lynne Melnyk (carried over from previous term) District Director Alternate - Robert Ramik (carried over from previous term)

#### MID-TERM CHANGES

Occasionally changes are made mid-term in the positions of District Director and District Director Altermate. These are as follows:

#### DISTRICT 4 District Director Brenda Ziegler

My introduction to rhododendrons "blossomed" shortly after moving to Portland. In the early 1990s I began "visiting" chapter meetings whenever the programs were travelrelated. Eventually I served on the Board of Directors, as well as acted as Hospitality Chair, followed by 2 years as Vice-President and 2 years as President which just ended July 1, 2016. Now as Past President, I am finding the responsibilities do not go away! I have received 2 awards—one, the Bronze Award from the Portland Chapter, and two, Bob MacArthur named a rhododendron after me. I am honored to receive these acknowledgements.

I was born and raised in South Dakota. I received my B.S. in Business Administration with Concentrations in Marketing, Management, and Industrial Relations, as well as a minor in Economics from Mankato State University in Minnesota. For the first 5 years after graduating, I was a traveling sales rep—which I loved! After a trip to Australia and New Zealand in 1987, I visited a friend in Oregon and decided to move here—because it was so pretty!

I was fortunate to be hired by The Oregonian to sell retail display advertising. I did this for 2 years, after which I started my business, Execu-Gifts, Inc. I have been selling promotional products ever since. Marketing and helping others increase their

# Society News

company's visibility is a passion of mine that I am fortunate to make my living in.

In addition to operating my business, I serve as a board member on various organizations in addition to the Portland Chapter of the American Rhododendron Society. They are:

- \* EDAC Economic Development Advisory Committee for the City of Fairview (where my office is located)
- \* Portland Chamber Orchestra Treasurer
- Village Street Rowhouse Association #1 the HOA that my office belongs to Treasurer

I look forward to continuing to serve the ARS by being District 4 Director and getting to know more people and expanding my knowledge of rhododendrons.

#### **DISTRICT 4**

#### **District Director Alternate**

#### Anne Gross

Anne is originally from Berkley, California, and has a degree in economics from the University of California. She has been a member of the Willamette Chapter since the mid 1980s. She is a past Willamette Chapter President.

She has been ARS Secretary and past and present District. She is also serving on the RSF Board of Directors and its Executive Committee.

#### **DISTRICT 9**

#### **District Director Alternate**

#### Dr. Richard Mohr

Previously President of the Potomac Valley Chapter of the ARS from 2010-2,012, Richard developed his initial interest in botany from Professor Dr. Robert Muir at the University of Iowa. He became a high school science teacher and started raising plants and collecting orchids. Richard served a total of 32 years in the Navy being stationed worldwide including Naples, Italy and Bethesda, MD, where he had residency training in Oral and Maxillofacial Surgery and a post doctoral fellowship. He served in Viet Nam, the Third Marine Division in Okinawa, Japan, in Pearl Harbor and at several installations in the San Francisco Bay area where he joined the Orchid Society of California and the Peninsula Camellia Society. Retiring from the Navy in 1989, Richard opened a private practice for a year in Fremont, CA, and then accepted a position as Head of Oral and Maxillofacial Surgery at the VA Medical Center in Palo Alto, CA, with teaching credentials at Stanford University Hospital. While there, joined the DeAnza Chapter of the ARS.

He retired in 1998 from the Department of Veterans Affairs as an Oral and Maxilliofacial Surgeon, returning to Maryland where he joined the Potomac Valley Chapter of the ARS and also became President of the Camellia Society of the Potomac Valley in which he currently is serving a second term as President and is State Director for Maryland, the District of Columbia and Northern Virginia. Richard and his wife Ginny are both certified judges for the American Camellia Society and his wife Ginny recently became President of the Potomac Valley Chapter of the ARS. Both are frequent attendees at many Chapter and District 9 functions and exhibitors at Chapter truss shows. They have 4 children and 15 grandchildren with one in the Army and one in the Marine Corps.

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## **S**ociety News

## ARS Endowment Grant Program: Guidelines for 2017 Application

The purpose of the American Rhododendron Society (Society) is the encouragement of the culture of rhododendrons, including azaleas, and the increase in understanding of and interest in all aspects of these plants. In support of this mission the Society has established a grant program utilizing funds from its endowment. Activities to be supported may include the development of programs, projects or publications that educate the general public in the growing and culture of rhododendrons. Amount of grants will generally not exceed \$3,000.

Proposals are accepted up to the deadline of **March 1, 2017** and must be submitted to the Endowment Fund Committee. The applicant must notify the appropriate District Director of the application and request a "letter of assessment" to accompany the application. The appropriate District Director is the one whose geographic responsibility includes the location where grant will be utilized. The application and letter of assessment will be reviewed by the Endowment Fund Committee and their recommendation will be acted upon by the board at the annual spring meeting. Successful applicants will be supplied 'Condition of Acceptance' letters and upon completion and return to the Society, funds will be sent to the applicant. Unsuccessful applicants will also be notified after the Board meeting.

Proposals should request funding for a single calendar year or less and only one proposal per applicant will be considered. A complete proposal must include:

1) Background and history of the applicant group and the role it provides in the



Create a Legacy with the ARS Endowment Fund

You have great opportunity to give back to the rhododendron community and be part of the incredible difference that can be made through your support! A tax deductible gift will help strengthen the society by increasing the financial capacity of the Endowment Fund to support projects that broaden the interests, curiosity and knowledge of future generations attracted to rhododendrons and azaleas.

It is the income and growth from the Endowment Fund that provide grants to worthwhile projects and funds special activities in accordance with the Society's mission. With your endowment gift you can honor a special person or event or memorialize a friend or loved one. By combining your respect for that special person with your passion for rhododendrons you can enhance your legacy and help the Society at the same time. Whether you make your gift now or as part of your estate, you are helping the Society share its mission now and in the future.

A donation to the Endowment Fund can make that happen and help the Society. Please mail your gift to: ARS Endowment Fund. P.O. Box 214, Great River NY 11739.



encouragement and understanding of rhododendrons and azaleas. Newsletters and other publications that describe the applicant are welcome.

- 2) Description of the project and its objective.
- 3) Statement of how the project fits the interest of the American Rhododendron Society. How does it educate? How many people will be affected?
- 4) Budget for the project, a timetable for its completion, and a statement of whether partial funding would or would not be useful. Note: no changes in the budget or nature of the application will be accepted after submission without prior approval from the chair of the Endowment Fund committee.
- 5) List of the group's current sources of support and income.
- 6) List of all sources, from which funds are currently being sought for the proposed project, including any support already confirmed.
- 7) Letter of assessment from the appropriate District Director.

The application can be sent by postal mail or email to Bill Mangels, Chair of the Endowment Fund Committee. Questions regarding the grant program should be directed to Bill as well.

Bill Mangels Endowment Fund Committee Chair

#### In Memoriam

#### John C. Cowles

John C. "Jack" Cowles died at his home on November 4, 2016, four days shy of his 93rd birthday.

He and his wife Eveleth were charter members of the ARS Massachusetts Chapter and were awarded the Bronze Medal. Jack was the first two-year president during a time of rapid growth of the chapter, and he helped set the tone for friendliness and cooperation. He was awarded the ARS Silver Medal in 1992.

Jack was born in Mayaguez, Puerto Rico, to a family of horticulturists and learned hybridizing in his teens. His first opportunity came with a position as gardener at the Dexter estate in Sandwich, MA (now Heritage Gardens). With the help of towhees who turned up old labels, Jack was able to reconstruct the ancestry of plants bred by Charles O. Dexter and his gardener Tony Consolini. During bloom season Jack started every day by making a number of crosses. Several of his seedlings have now been named and registered.

Jack's next job was head gardener (the first not trained at Kew) on the Hunnewell Estate in Wellesley. A nice group of R. yakushimanum x R. venator involved crossing two plants that didn't belong to Jack and led him to claim "I'm the biggest bumblebee in Wellesley.

Jack retired in 1995 to an overgrown acre of land in Stow, MA. He moved in young rhododendrons and added collections of Meserve hollies and Dick Jaynes' mountain laurels. He and Eveleth started breeding daylilies. Jack was able to continue gardening and wood splitting for 11 months after a major operation in September 2015 until the pancreatic cancer recurred.

# Sichuan 2016 A Lapponica Odyssey

A Lapponica panorama, the simultaneous flowering of mainly *R. intricatum, R. nivale* and *R. nitudulum*.

Ole Jonny Larsen Ålesund, Norway



In the spring of 2016, a group of Scandinavians toured the central parts of Sichuan in search of rhododendrons and other plants. We were four Norwegians and two Danes, all four of us familiar with Chinese mountains and rhododendrons in their native habitats, but two were new in the field. The participants were Bent Ernebjerg and Hans Eiberg from Denmark; and Jan Ole Westerhus, Knut Grebstad, Egil Valderhaug and the author and tour leader, Ole Jonny Larsen, from Norway. Our ages ranged between 59 and 72. Most of the time it was a comfortable trip where we slept in hotel beds and had our dinners in nice restaurants. However, before our last week, the party split up. The Danes flew home, and the four Norwegians challenged themselves by joining a well-known trekking route through the famous Gongga Shan area. Quite unexpected, our 2016 Sichuan tour then turned out to be a real odyssey through fantastic Lapponica landscapes. Another surprise was finding three localities with the very rare *Rhododendron rufescens* in full flower, but more about that later.

The tour was organized by a French tourist company based in the town of Lijiang, and our guide was He Zhi Jian, a.k.a., "Dennis," who some of us knew well from former trips. He is a very skilled and professional person! We started out from Chengdu on May 21, the province capital of Sichuan with 14.5 million inhabitants. This town

is in fact bigger than the populations of Denmark and Norway together, which says something about both Scandinavian countries and Chinese cities! There are direct flights between Chengdu and Amsterdam in central Europe, so in theory one can leave home in Europe and be in the rhododendron fields in Sichuan in two days! We had planned a circular tour that covered the central parts of Sichuan province and then returned to Chengdu. One goal was to avoid many long drives, and another was to stay at the same hotel more than one night in order to have more time each day to explore rhododendron areas. Especially when one get older, this kind of tour can be very rewarding and not involve too much struggle.

During the first drive from Chengdu to Rilong, we crossed the Jia Jin Shan pass at 4114 m (13,497 ft). Near the pass we found Rhododendron anthopogon, and further down there were flowering R. phaeochrysum var. levistratum. Dennis had picked good hotels for most of our trip, and our stay in the small village of Rilong was no exception. We were optimistic for the next day when we were going to visit a nature reserve in the Shuangqiaogou Valley near the beautiful Mount Siguniang, but to our surprise snow had fallen in the mountains during the night. It was cold, and it was raining most of the time we were in the reserve. Except for seeing R. nivale subsp. boreale in flower (but covered with snow!), some yellow Meconopsis and a scenery which obviously must have been beautiful under better weather conditions, the

#### Rhododendrons from Section *Rhododendron*, Subsection *Lapponica*

These lepidote rhododendrons are shrubs from moorland or high altitude, relatively small in all their parts except for R. cuneatum. Many lapponica species only grow well in culture in the colder climates of Scotland, Scandinavia or Atlantic Canada. The leaves are usually less that 2.5 cm (one inch) long and densely scaly on both surfaces. The flowers, coloured mainly in the blue end of the spectrum (lavender, mauve, "almost" deep blue to purple, although a few species have white, pink or yellow flowers) are typically widely funnelshaped, except for R. intricatum where they are tubular funnel shaped. The more common species in cultivation are R. fastigiatum, R. impeditum, R. polycladum and R. russatum.



Very light coloured *R. concinnum* (Benthamianum Group).

day was disappointing, and we were all anxious that the cold and wet weather might follow us over the next days.

Well, we did not have to worry! By that evening the weather improved, and during an afternoon walk in the area around the village, we found a plant that was both well known and strange at the same time. It was obviously *R. concinnum*, but the flower colour was odd, a very soft pink. Since our plant totally matched a photo in McQuire and Robinson's (2009) book Pocket Guide to Rhododendron Species, it had to be R. concinnum var. benthamianum.(Chamberlain al et (1996) just call it R. concinnum, but some have referred to it as Benthamianum Group). More about odd R. concinnums later. The day ended with a good whisky after dinner, and our cold start was soon forgotten.

Next morning we headed for Balang Shan pass (4000 m, 13,123 ft) in sun and a good temperature. In fact most of the trip from now on was in sunny weather, sometimes actually too sunny as it made photographing difficult. On this half-day trip we found *R. primuliflorum*, which we saw during most of the tour, varying a lot in flower colour from white to deep pink; very fine *R. vernicosum* in full flower; *R. concinnum* with a normal flower colour and *R. aganniphum*. Some of the elepidote species were being attacked by a rust fungus, which we would see much more of later.



R. nivale, unusual pink-purple.



Very deep coloured R. primuliflorum.

After lunch, we headed for our next stop, the small city of Danba, with touristic stops in traditional villages during the drive. During dinner at our hotel that night, the local mayor turned up at our table and honoured us with patriotic songs about the Danba area. We sang a Scandinavian folk song in return.

Our plan for the next day was to drive through the famous Danba Gorge and try to find R. danbaense. We saw many large rhododendrons from the car, mostly R. decorum, but finding a good place to stop was difficult, and soon we had passed through the whole Danba Gorge without being able to stop and look for any plants at all! To our annoyance, driving back seemed out of the question to our guide and driver.

Instead, we now had the beautiful mountain called Heize Shan in front, and so we followed a dusty road towards this mountain. Here we had our first meeting with R. websteranum. This species was not introduced until 1990, and is quite rare in cultivation. Its upright growth habit and greyishgreen leaves are good identification features. It seems odd that this species



On the road up to Heize Shan.



Hans Eiberg (Denmark) examining *R. websteranum* by the roadside.

was introduced so late as we saw literally thousands of them along the roads, especially in yak-grazed landscapes where little else grew. The yaks obviously do not like eating rhododendrons!

At the bottom of the valley where the road ended, there is a good path up to a plateau at 4100 m (13,451 ft) with a sacred lake. Here there is a wonderful view to the great Heize Shan. The banks around the lake were crowded with a spider web of prayer flags which westerners may consider more as pollution than worshipping, but the Lamaism people obviously have a different view in this matter. New rhododendrons seen during



Lamaist decorations/prayer flags above Tagong city.

the hike were Lapponicas like *R. nitidulum*, *R. intricatum* and *R. flavidum*, all in flower, and maybe *R. thymifolium*. It was a very hot day, so a local man selling bottles of beer by the parking place was very popular.

We spent the night in the city of Tagong at nearly 4000 m (13,123 ft). Tagong has a famous Lamaism monastery that dominates much of the city centre. The hills around are covered with enormous symbols made from prayer flags. It may be compared with the famous "HOLLYWOOD" sign on the hill above the well-known American town, but it has only one sign! Around Tagong there were symbols on all of the surrounding hills, and since the landscape consists only of grassland, they could be seen from miles away.

Our next drive gave another taste of the richness of Lapponicas in Sichuan. On our way from Tagong to Kangding, there were more large stands of *R. websteranum* along the road sides. When we were emerging from Zheduoshan Pass near the Kangding area airport at 4298 m (14,101 m), more Lapponica species turned up, and most of them in full flower. *R. intricatum* with their *Daphne*-like flowers and a fine palette of blue flowers were stunning, but also *R. nitidulum* and *R. nivale*. At the highest point, 4214 m (13,825 m), some special forms occurred. First found was one single plant of *R. nivale* with flowers in a deep pink, almost soft purple, and then *R. intricatum* with pink flowers. Since the area was large and impossible to search through in half an hour, I feel sure more interesting flower varieties could be found given enough time. On the other side of the pass, nearer to Kangding, we passed a hillside with lots of *R. concinnum* var. *pseudoyanthinum* (simply *R. concinnum* (Chamberlain 1996) and a little later also

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R. nitudulum var. nitudulum.

R. oreodoxa var. fargesii, both flowering well. A stand of deep pink R. primuliflorum was very impressive, the flower colour almost as red as that of R. kongboense.

We reached Kangding early in the afternoon and turned from plant hunters to city tourists for some hours. For dinner, some of us tried a spicy pot including yak stomach in thin slices and yak blood in pudding form. Our Chinese friends obviously loved it, and I wanted to be open-minded and try it myself. With lots of heavy spices, it was not bad, but I could not take a large portion. Fortunately, they also served traditional Chinese cuisine. We now stayed four nights in a comfortable hotel and drove up into the mountains by minibus during the days. A very comfortable way of plant hunting!

Mugetso Lake (also spelled Mugecuo) is at 3780 m (12,402 ft) north of Kangding and



R. intricatum, unusual pink R. intricatum, pure white form.

form.

R. intricatum, "normal" blue form.





#### R. flavidum.

R. thymifolium.

the area around it is a national park. Above the lake, there were several rhododendrons, but no new species for us. Leading from the bus stop at the lake far down to a lower area, there were good concrete steps with a solid bannister, which took us to a beautiful river with lots of big rhododendrons on both sides. Our first new species there were large specimens of the big leaved *R. watsonii*. There are only three *Grandia/Falconera* species growing in the central part of Sichuan, so we were very happy to find *R. watsonii* in flower. We were also happy to find flowering *R. bureavoides*! Some of these plants were hanging out over the river as if some artist gardener had planted them there for decoration.



Lamaist/buddhist painting on a rock near Mugecuo lake.



*R. bureavoides* by the stream below Mugecuo Lake National Park.

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R. rufescens with dark brown lower leaf surface.





R. rufescens flowers.

Egil Valderhaug with *R. rufescens* by a small stream.

The next two days we spent around Ya Jia Gen Pass, with the highest point at 3850 m (12,631 m). The absolutely best find here were three colonies of the rare *Pogonanthum* species *R. rufescens* just below the pass on both sides. According to the *Flora of China* (http://www.efloras.org/florataxon.aspx?flora\_id=2&taxon\_id=200016547), this species can be found in several parts of Sichuan, but so far very few modern western plant people have seen it. It was described as early as 1895, but is still not properly introduced to gardens in Europe and the US. That is a pity, for *R. rufescens* is a beautiful species. The dark brown scales in thick layers on the leaf lower surface contrasts magnificently with the (normally) pure white flowers. One interesting observation was that all three stands we found were associated with water. Most plants grew on the banks of a small stream or at the shore of a small pond, and it seems likely that the preferred growing condition must be quite wet during some periods of the year, the roots even soaked in water.

Other good plants at the highest points were lots of low and compact, dome-shaped specimens of *R. phaeochrysum*. If this species behaves like *R. degronianum* subsp. *yahushimanum* from the upper areas of the island Yakushima, it will retain its compact habit even if transplanted to lower elevations, which would be very desirable. Further down were very big specimens of *R. faberi* subsp. *prattii* (now recognized as *R. prattii*), easily identified by its indumentum that has an open space along the leaf edge. Our first *R. orbiculare* and one single *R. wasonii* were other first observations for the trip. The *Lapponica* species were also present at the Ya Jia Gen Pass, and again most were in



R. phaeochrysum var. levistratum.



Bent Ernebjerg (Denmark) with *R. phaeochrysum* var. *levistratum.* 

flower. However, the best show was yet to come!

A search at a lower altitude at the south side of the pass gave several different species. Enormous R. calophytum were of course very impressing, and so were the young "seedlings" below, themselves the size of a normal rhododendrons many gardens. Other new in rhododendron species here were R. longuesquamatum, R. ambiguum, R. anthosphaerum and R. polylepis. The yellow flowers of R. ambiguum were especially much admired, but even that was forgotten when we spotted the pink flowers high up in a tree of R. dendrocharis! Alas though, they were far out of reach, until we looked down and found lots of seedlings growing just at our feet. The plant in the tree had obviously dropped seeds that had germinated in the moist moss below.

That Sunday night, there was a goodbye party to our two Danish



R. orbiculare with heavy attack of rust fungus.

fellow travelers, Bent Ernebjerg and Hans Eiberg, who had decided to go home before the final six day trek. Both are very experienced rhododendron men, and their knowledge had been priceless during the first part of our tour. The rest of us were now going to join a partly commercial trekking route over parts of the Gongga massif, towered by Mount Gongga at 7556 m (24,790 m). Trekking in mountains just for the fun of it is a quite new activity among the Chinese, and the participants we met seemed to be relatively wealthy people. The route we followed started south of Kangding at 3540 m (11,614 m) and ended at the Gongga monastery with its magnificent view of the Gongga Shan. Trekking with us were two Chinese groups that were not interested in plants at all, and unfortunately none of them spoke English, but there was a group of young girls that were eager to take selfies together with the tallest men in our group! A band of horsemen with their mules was hired to transport the tents and food. This trek always goes only one way, so when we left them after six days, the horsemen had to walk all the way back to start a new round.

The first part goes through a forested valley, and along the path we found lots of R. orbiculare. An alarming observation was that all of them were more or less infected with a kind of rust fungus, some of them really badly. However, other species like R. vernicosum and R. prattii nearby were not infected at all. Along a part of the path grew R. concinnum with very pale pink flowers, some of them almost



R. rupicola var. chryseum.

whitish. They looked a lot like the *R. concinnum* (*R. concinnum* var. *benthamianum*) we found earlier. More traditionally coloured *R. concinnums* grew in between, so there should be some exchanging of genes between them. Why they are varying so much in flower colour in a small area is not for me to explain. Higher up Lapponicas greeted us again, and they were present for days from then on. A little above the tree line, one single plant of *R. rupicola* var. *chryseum* was found covered in yellow flower. There are only two yellow flowering *Lapponica* species, and we were pleased to have found both of them during our tour. Oddly enough, we only found this single plant although the landscape was open and easy to look over.

We then walked through more alpine landscape for some days, crossing Pan Pan Pass (4700 m, 15,420 ft) and Longjiman Pass (4600 m, 15,092 ft). From this last pass, we had a wonderful view to the peak of the majestic Gongga Shan. The weather was fine most of the time, and a T-shirt was enough at the Longjiman Pass, but dropped down to near freezing one clear starry night when camping. The descent from Pan Pan Pass into the upper Yulongxi valley was what inspired the name for this article. As we walked down, more and more *Lapponica* species were in flower, and soon they dominated the whole landscape. It was a mix of *R. nivale, R. intricatum* and *R. nitidulum*. Looking closer, we found an array of colour forms, from deep to very light blue/violet. Several plants had almost white flowers, and a few of them I would call perfect whites.

When we reached the camp, it was afternoon. The low sun highlighted a mountainside covered in blue Lapponica flowers for many kilometres, and all at the height of their flowering. I realized that I was at a perfect viewing point, had perfect weather and had hit the perfect timing during the flowering season for a sight like that. I have never experienced anything like it during my plant trips to China.

The Gongga Monastery had a few rooms for tourists, and we stayed there on our last night of the trek. On the way back we spent one more night in Kangding, and then we were on the road bound for Chengdu. We ended up on the 19th floor of a hotel in the very center of the town, and had plenty of time for walks and shopping. I had planned to buy T-shirts for my grandchildren with Chinese text on them, but that turned out to be impossible. All available t-shirts with text were in English! Even shirts with "US army" were for sale! I wonder how Mao and Chou would have felt about that! Deng on the other hand would maybe approve, as long as they made money.

#### References

- Chamberlain, D., R. Hyam, G. Argent, G. Fairweather and K.S. Walter. 1996. *The Genus Rhododendron. Its classification & synonymy*. Royal Botanic Garden, Edinburgh: 181 pp.
- McQuire, J.F.J., and M.L.A. Robinson. 2009. *Pocket Guide to Rhododendron Species*. Kew Publ., Royal Botanic Garden, Kew: 692 pp.

Ole Jonny Larsen is the chairman (= president) of the Norwegian Rhododendron Society.



Gongga Shan with R. nivale in front.



The author (Ole Jonny Larsen) at the highest pass, Pan Pan Pass at 4700 m.

## 2016 ARS Photo Contest Results



## Winner Best in Contest

**Steve Henning** Valley Forge Chapter *R. periclymenoides* 

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## Runner-up Best in Contest

**Gordon Walters** 

(Great Lakes Chapter). *R.* 'Midnight Sun'. See page 72 for full photo.

## Runner-up Best in Contest

Marc Colombel (Scottish Chapter). *Graphocephala fennahi.* See page 71 for full photo.



#### The Three 2016 ARS Photo Contest Judges

1) Doreen Wynja (McMinnville, OR), principle photographer for Monrovia Growers, has worked on the last two books from Sunset Magazine, and is just finishing up the soon to be released book on Easy Care. She has been photographing for 30 years, with her primary work being commercially driven. Her imagery graces the pages of This Old House and Fine Gardens among other horticulture magazines. To contact Doreen or see her imagery, go to www.EyeoftheLady.com where you'll find an ever-growing Horticultural Library of her images.

2) Stewart Yee lives in Vancouver, BC, Canada, and has a BSc in marine biology (1982) from the University of British Columbia and a diploma in freelance photography (1991) from the Pacific Western Academy of Photography. He spent about ten years as a part time photographic assistant and as a professional freelance wedding photographer in the 1990's, and is now a passionate nature and travel photographer.

3) Dr. Glen Jamieson, JARS Editor and keen photographer.

## 1) Flower, truss or spray



*Winner:* **Steve Henning** (Valley Forge Chapter). *R. periclymenoides.* Also see page 65.



*Runner-up:* Earl Sommerville (non-chapter). 'Carlson Calendulaceum', unregistered.



*Runner-up:* Jean Francois Petton (Scottish Chapter). *R.* benhallii (previously Menziesia ciliicalyx).

## 2) Plant in bloom



*Winner:* **Steve Henning** (Valley Forge Chapter). Unlabeled pink azalea.



*Runner-up:* Gordon Walters (Great Lakes Chapter).'Goldsworth Pink'. Nikon D7000 iso 200 50mm F/16 1 sec.

# 3) Landscape or plants in the wild or in gardens



*Winner:* Ralf Bauer, Offenburg,Germany. (Potomac Valley Chapter). *R. ferrugineum,* Iffigsee, Berner Oberland, Switzerland. Nikon Coolpix S9900, F3.7, 1-1600sec.



*Runner-up:* Ralf Bauer, Offenburg, Germany. (Potomac Valley Chapter). *R. smokianum*, Mount Kephart, The Jumpoff.

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4) Foliage



*Winner:* Richard Jones. (Noyo Chapter). *R. bureavii* cross.



*Runner-up:* Harold Greer (Eugene Chapter). *R. sinogrande,* Dover Nursery.

## 5) People, insects or animals



*Winner:* Marc Colombel (Scottish Chapter). *Graphocephala fennahi.* 



*Runner-up:* George McLel-Ian (Middle Atlantic Chapter). *Kalmia* on Wayah Bald.

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6) Other; for creative or artistic effects of any kind that involves these plants



*Winner:* Gordon Walters (Great Lakes Chapter). 'Midnight Sun'. Nikon D 7000 iso 200 85 mm micro f/9 1/50



*Runner-up:* Harold Greer (Eugene Chapter). *R. strigillosum,* RSBG.

## Tips for Beginners: Winter Protection for Rhododendrons

Sylvie Tremblay Wotton, Quebec Canada



Photos by Nicole Lafleur

(Reprinted from the October 2015 Rhododendrons et compagnie, the newsletter of the Société des rhododendrons du Québec; translated from French by Dorothy Jamieson, Mount Arrowsmith chapter.)

If you are an amateur gardener and a lazy one like me, you have no doubt planted rhododendrons and enjoyed their beautiful blooms over several years without really worrying about them. It has even been difficult for you to resist cultivating a few more tender plants at the limit of their hardiness zone, jeopardizing their survival by leaving them without winter protection. Exposed to the effect of intense, prolonged cold, the leaves roll up like little cigars and the blooms are stunted, to your great sorrow (Fig. 1).



Should you become worried and start questioning whether this is due to climate change? In fact, the last two winters have been particularly cold in Quebec, Canada, from December on (-25° C, -13° F) and the plants have not been able to profit from a good snow cover in Montreal or even in the Eastern Townships and Laurentian regions.

I have therefore decided to offer a new winter coat to my beloved shrubs. As I knew nothing about this, I read several articles on the subject, notably the text by Richard Dionne found on the website of the Société des rhododendrons du Québec (SRQ, http://rhododendronsquebec.org/101/protection-hivernale-rhododendron/). To learn more, I also consulted Nicole Lafleur, a specialist in the winter protection of rhododendrons, as she grows an impressive collection of these plants in the Eastern Townships. Here is some practical advice illustrated with the help of photos, which she has generously provided.

#### Hardiness

Hardiness is the ability of plants, including rhododendrons, to resist cold. Minimum temperature is not the only criterion which defines a plant's hardiness zone rating: snow cover, the timing of winter freezes, the nature of the soil and soil drainage in spring all, in their own ways, influence a plant's resistance to cold. Further, a microclimate can be created with some kind of screen, for example, a hedge to block prevailing winds. The topography of the land, and even the presence of a large body of water, can also influence a microclimate.

Above all, in order to help evergreen rhododendrons survive the winter, it is necessary to water them regularly and copiously in the absence of sufficient rain, right up until the soil freezes, so they start the winter well hydrated. This will considerably improve their chances of avoiding winter desiccation.




#### **Types of Protection**

During winter, evergreen species are particularly sensitive to the cold, drying winds from the northwest. Furthermore their flower buds, already present in the fall, are at risk of desiccation when they are exposed for long to sun rays and freezing winds.

This is why it is best to protect our new acquisitions over the first winter by placing around them a few stakes or a snow fence covered with burlap or frost protective fabric. It is very important that the cloth doesn't touch the rhododendron leaves (Fig. 2). Also, the protection should be installed as late in the season as possible, usually in November. To avoid difficulty installing the fencing material into frozen soil, staking may be put in place around the plant in October but the burlap or frost protective fabric should be installed only when the cold has set in for good.

A general rule is that rhododendrons benefit from a good snow cover to survive extreme cold. Deep snow protects their shallow root systems and also shelters their leaves and flower buds from the sun and wind. In regions where the snow cover is too often lacking, conifer branches covering the soil and young plants can assure supplementary protection and counter temperature fluctuations (Figs. 3, 4).







While snow provides excellent protection, its weight can sometimes cause branches to snap. To solve this problem, a light yet strong wire netting can be installed (Fig. 5) in an arch form over the plants. In addition to breaking the heavy snow while falling through the mesh, air circulation will not be diminished and squirrel damage may be minimised. This method is very useful for small alpine rhododendrons.

Thanks Nicole! I, for one, will put to the test these tips on winter protection on some of my plants, especially those that suffer too often from the cold, even if they have been established for several years.

P.S. Nicole assures me that I don't need to worry if the leaves of my evergreen rhododendrons roll up in freezing weather, as it is their way to protect themselves from excessive transpiration.

Sylvie Tremblay is a member of the Société des rhododendrons du Québec.

## The Word: Epiphyte

Bruce Palmer Cutten, California



Photos by the author

The word for this winter season is **EPIPHYTE.** The word derives from the Greek *epi* (upon) and *phyton* (plant). Epiphytic plants live on other plants, typically on the stems of large trees, but do not parasitize them, carrying on photosynthesis independently of their hosts. I was drawn to this word as I was watering our epiphytic vanilla orchid. It lives on our back porch and is successfully clinging to the upper casing of the window, as show in Fig. 1.

An epiphytic existence is quite advantageous to smaller plants in tropical rain forests and more temperate cloud forests. Rainfall in these habitats typically exceeds 100 in (250 cm) per year and can exceed 400 in (1000 cm) in places such as the cloud forests of my home island of Maui. Forests in those environments produce tall canopy trees. A ground cover or understory plant in this environment is going to have major problems. The soil is constantly saturated, making it hard for roots to carry on respiration, and in addition, canopy trees often block out most of the light, making photosynthesis quite challenging. The solution to both of these problems for smaller plants is to become epiphytic. In tropical and temperate wet forests it is common to see all sorts of plants growing as epiphytes on the trunks of trees. Spores of mosses, liverworts and ferns, and seeds of orchids, bromeliads and other small plants lodge in bark, branching





points and rotted spots. There they germinate and thrive, carrying on photosynthesis, getting water, carbon dioxide and oxygen from the air, not the plants they live on. Some of the required micronutrients may come from dead cells on the outsides of the host plants or be blown as dust into cracks in the bark by wind. By whatever means epiphytic plants get their sustenance though, they have great advantages over small plants forced to grow on the forest floor.

One of my favorite epiphytic plants, endemic to the cloud forest on Pu'u Kukui, the western peak of Maui, is *Lobelia gloria montis.* This lobelia, described and named by Joseph Rock of American Rhododendron Society fame, is six to ten ft (1.8-3 m) tall when in bloom.

Typically, as in Fig. 2, it grows on the trunks of 'Ohi'a (*Metrosideros polymorpha*) trees to escape the knee-deep mud on the forest floor.

Epiphytic rhododendrons are fairly common among vireyas and also include some Himalayan species, such as *Rhododendron edgeworthii*. We do not usually think of most rhododendron species as being epiphytic, but Lady Bird Johnson Grove in Redwood National Park has examples of epiphytic *R. macrophyllum* growing on the bark of both Coast Redwood (*Sequoia sempervirens*) and Douglas-fir (*Pseudotsuga menziesii*). In our redwood forests the soil is not generally saturated, but light can be hard to come by. Fig. 3 shows *R. macrophyllum* seedlings growing about ten feet (three m) off the ground on the bark of a Douglas-fir. Recently, Don Wallace of Singing Tree Gardens, author of the lead article on page 3, has been growing most of his rhododendron plants solely in "Gorilla Bark" (shredded redwood bark) to great advantage. That probably makes sense, given that *R. macrophyllum* can grow as an epiphyte on redwoods.

When you visit Humboldt County, California during the American Rhododendron Society's International Convention in Eureka at the end of April, you might consider

Fig. 2.



Fig. 3.

hiking into Lady Bird Johnson Grove in Redwood National Park to observe the epiphytic rhododendrons and experience the impressive old-growth redwood forest. Driving a few miles farther, past the end of the pavement, you will travel through vast displays of invasive blue lupines. That side trip, about an hour north of Eureka, would be well worth the extra time and effort.

Bruce Palmer is a member of the Eureka Chapter and a frequent contributor to JARS.

# The Biodiversity Heritage Library's Digital Books

Pam Hayward Devon, UK

Pam Hayward, with the Royal Horticultural Society (RHS) Rhododendron, Camellia and Magnolia (RCM) Group, recently brought to my attention the amazing digital resource that is the Biodiversity Heritage Library (www.biodiversitylibrary.org/), a consortium which works to make scientific literature available to all. She pointed out that a few moments searching on the website reveals a staggering number of important historic botanical journals and periodicals that are available to download. All that is required is the tenacity to delve and a good internet connection!

One such gem which has been made available courtesy of the Missouri Botanical Garden Library is a book that is almost everyone's dream book to own: Joseph Dalton Hooker's *The Rhododendrons of Sikkim-Himalaya*. It has been scanned in fantastic detail for on-screen viewing and I urge you to take a look at it at: www.biodiversitylibrary.org/ item/42878#page/2/mode/1up

To download a copy, simply click the "Download contents" button at top right of the page; click "Download Book" from the drop-down menu and choose your format. A pdf file of this book is 125 MB, and hence the need for a fast connection, but Pam pointed out it is well worth the wait!



## 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 December 1, 2016, 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
- (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) 'Joan's Peace'

Elepidote rhododendron: 'Janet Blair' (s) X ('Margalit' x 'Woodbench'\*). H (1994), G (2002), REG (2016): Richard Murcott, East Norwich, NY; S (2016), N (2016): Margaret Monitto, Huntington Station, NY. Flrs 10/ball truss, funnel campanulate, 2.25 inches (57mm) long x 2.25 inches (57mm) wide with 6 rounded lobes, slightly wavy margins. Bud: light yellow (15D). Inside: pale yellow green (4D) shading to pale yellowish pink (29D) at margins, with spotted amber blotch in dorsal area. Outside: pale yellowish pink (29D). Calyx: 1mm long,



'Joan's Peace'. Photo by R. Murcott.

light green (129C). Truss 8 x 8 inches (203 x 203mm). Lvs 7 x 2 inches (178 x 51mm), elliptic, acute apex, flat margins, brilliant green (128A). Shrub 4 feet (1.2m) high x 5 feet (1.5m) wide in 21 years, lvs held 2 growing seasons. Hardy to -5°F (-21°C). Flowering midseason (May on Long Island). Etymology of name: for the late Joan Muller, of Bethpage, NY, a friend of the nominant. Synonym: TT135 (hybridizer's number).

(\* 'Woodbench' - not registered. It is a yellowish pink hybrid by Howard Phipps Sr.)



#### (a) 'Laurelwood Sunset'

Evergreen azalea: 'Cherokee Chief' selfed. H (1975), G (1980): Al Fitzburgh, Caldwell, NJ; N (2015), REG (2016): Friends of Laurelwood Arboretum Inc., Wayne, NJ. Flrs 2-3/ terminal cluster, reflexed funnel, 3.25 inches (83mm) long x 3.25 inches (83mm) wide with 5 rounded lobes, wavy margins. Bud: pink. Inside and outside: deep yellowish pink (47C). Reddish filaments, pink style. Lvs 1 x 0.5 inches (25 x 13mm), elliptic, cuneate base, broad acute apex, flat margins,



'Laurelwood Sunset'. Photo courtesy of Laurelwood.

upangled from midvein, dark green, glossy. Shrub 4 feet (1.2m) high x 5 feet (1.5m) wide in 40 years; dense habit, lvs held 2 growing seasons. Hardy to -5°F (-21°C). Flowering late (June in New Jersey).

#### (r) 'Meerkerk Morning Grace'

Elepidote rhododendron: 'Fabia' (s) X *R. bureavii*. H (c. 1975), G (unknown): Ann Meerkerk, Greenbank, WA; N (2016): Linda McCormick, Greenbank, WA; S (2016), I (2018, planned), REG (2016): Meerkerk Gardens, Greenbank, WA. Flrs 12/flat truss, funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, flat margins. Bud: vivid reddish orange (42A). Inside: strong purplish pink (55B) with vivid red (44A) spots on upper three lobes. Outside: deep purplish pink (55A). Calyx: 0.25 inch



'Meerkerk Morning Grace'. Photo by F. Fujioka.

(6mm) long, yellowish white (156D). Reddish filament and style, yellow stigma. Truss 4 inches (102mm) high x 6 inches (152mm) wide. Lvs 6 x 2.5 inches (152 x 64mm), elliptic, convex, rounded base, acute apex, downcurved margins, dark yellowish green (139A), glossy. Indumentum: dense hairy, underside and petiole, moderate yellow (163C) maturing to moderate orange yellow (165C). Shrub 12 feet (3.7m) high x 13 feet (4m) wide in c. 40 years; intermediate habit. Hardy to 10°F (-12°C). Flowering midseason (early to mid-May in Puget Sound). Etymology of name: in honor of the late Grace, grandmother of the nominant, a volunteer at Meerkerk Gardens who won naming rights in a Meerkerk raffle.

#### (r) 'Sandra Leigh Moser'

Elepidote rhododendron: 'Madrid' (s) X (*R. smirnowii* x *R. degronianum* subsp. *yakushimanum*). H (2009), G (2015), N (2016), REG (2016): Percival B. Moser III, Bryn Mawr, PA. Flrs 6-8/dome truss, funnel, 2 inches (51mm) long x 3.5 inches (90mm) wide with 5 rounded lobes, wavy margins. Bud: strong purplish red (61B). Inside: white (NN155D) blending to strong purplish pink (73B) on upper three lobes, with deep red (60A) dorsal blotch that extends to base of flower.



'Sandra Leigh Moser. Photo by P. Moser.

Outside: strong purplish pink (73B). Calyx: 0.25 inch (6mm) long, strong yellowish green (141C). Truss 5 inches (127mm) high x 6 inches (153mm) wide. Lvs 3.5 x 1.5 inches (90 x 38mm), elliptic, cuneate base, broadly acute apex, downcurved margins, moderate olive green (146A), semiglossy. Shrub 2 feet (0.6m) high x 2.25 feet (0.7m) wide in 6 years; intermediate habit, lvs held 2 growing seasons. Hardy to 0°F (-18°C). Flowering midseason (May in Philadelphia). Etymology of name: for a daughter of the hybridizer. (Note: The pollen parent is an unregistered cultivar by Joseph B. Gable, pre-1972; it is sometimes referred to as Haag's Selection.)



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#### (v) 'Sunset Gold 50'

Vireya (lepidote) rhododendron: *R* aurigeranum (s) X unknown. H (pre-1994), G (unknown), N (unknown), I (unknown): Graham Snell, Maleny, Queensland, Australia; REG (2016): Sherla Bertelmann, Kea'au, HI. Flrs 12-30/ dome truss, tubular funnel, 2.5 inches (64mm) long x 2.5 inches (64mm) wide with 5 lobes, wavy margins, depressed midvein. Bud: greenish. Inside: typically



'Sunset Gold'. Photo by S. Bertelmann.

strong reddish orange (32B) with a thin vivid reddish orange (34A) margin; prominent brilliant yellow (13B) throat, with yellow extending slightly along midvein into center of lobe. Outside: thin margin of vivid reddish orange (34A), blending through vivid reddish orange (34B) and strong reddish orange (34C) to brilliant yellow (13C) at base. Truss 2.5 inches (64mm) high x 7 inches (178mm) wide. Lvs 7 x 2.5 inches (178 x 64mm), elliptic, rounded base, acute apex, flat margins, upangled from midvein, strong yellow green (144A) with moderate red (185B) edges, maturing to moderate olive green (147A). Shrub 4 feet (1.2m) high x 3 feet (0.9m) wide in 6 years; open habit, new foliage held horizontally, drooping to almost vertical when flowers open. Hardy to 35°F (2°C). Flowering fall through spring in Hawaii, with some summer bloom. Depending on culture, colors may vary, but retain a transition from reddish orange at margins to brilliant yellow throat. Etymology: The "50" in the name recognizes a truss the hybridizer once grew with just shy of 50 flowers.

#### (v) 'Sylvia's Coral Seas'

Vireya (lepidote) rhododendron: 'Pink Delight' (Veitch) (s) X 'Simbu Sunset'. H (unknown), G (unknown): Sylvia Saperstein, Australia; N (2014), REG (2016): Sherla Bertelmann, Kea'au, HI. Flrs 7-20/flat truss, tubular funnel, 2.5 inches (64mm) long x 3 inches (76mm) wide with 5 rounded lobes, flat margins. Bud: light yellow (21D) to strong vellowish pink (34D), with vivid reddish orange (40A) on lobe margins. Inside: vivid reddish orange (40B) with brilliant yellow (21C) throat and midvein halfway up each lobe. Outside: brilliant yellow (21C) at base blending to vivid reddish orange (33A). Pale greenish yellow (10D) filaments, deep red (53A) anthers, strong greenish yellow (151B) style and stigma. Truss 8 inches (203mm) wide. Lvs 3.5 x



'Sylvia's Coral Seas'. Photo by S. Bertelmann.

2 inches (90 x 51mm), elliptic, cuneate base, acute apex, flat margins, upangled from midvein, moderate yellow green (137A), semiglossy. Shrub 4 x 4 feet ( $1.2 \times 1.2m$ ) in 7



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years; open habit, not hardy. Flowering throughout the year, heaviest in spring and fall in Hawaii. In some trusses, a single (fused) pedicel will have 2 or 3 corollas. Synonym: 'Coral Seas'. Etymology of name: after the hybridizer.

#### 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 a pplications 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.

### **ARS SEED EXCHANGE**

The 2017 Seed Exchange will open in early January. A listing of available seed and ordering information will available at the ARS and Danish web pages (http://www.rhododendron.org/seedexchange.htm) and http://www.rhododendron.dk/ARS-seed.htm.

Seed sales are open to ARS members and seed donors at this time and to non-members after March 15th. Seed donor orders are filled first.

The price of seed from the 2017 catalog remains at \$3.00 per packet. This year the seed exchange partially subsidized a collection trek in Asia for rhododendrom and companion seed. This lot will be offered at \$4.00 per package. A \$3. (US) and \$4. (outside US) shipping and handling fee will be added to each order.

Norman Beaudry, Chairman ARS Seed Exchange



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Overseas members are welcomed annual dues of \$A25.00 (single) or \$A35 (member & partner) payable by \$A bank draft, Visa or Mastercard, inclusive of the annual Journal "The Rhododendron" airmailed. Admission to Society gardens in Australia. Extra \$A15 charge for regular newsletters unless delivered via email. Subscription year commences 1st July. Membership applications to: THE SECRETARY AUSTRALIAN RHODODENDRON SOCIETY INC. 12 Mernda Rd., Olinda Victoria 3788 Australia

## Deceased Members from 8/29/16 through 11/1/16

Franz, Robert W. Jacques, Marie Jasionowski, Edward Nelson, Carl W.

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Donor	Amount	Source
General Fund		
Cape Cod Chapter	\$7,336.15	Chapter Closed
Endowment Fund		
Great Lakes Chapter	\$50.00	In memory of William Glenn
		-

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## Errata

In the Fall 2016 issue of *JARS*, on page 198 under ARS Committees and on page 199 under ARS Services, the email address of Registrar Michael Mills is incorrect. His correct email address in both instances is: arsregistrar@gmail.com



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