# VANCOUVER ISLAND ROCK & ALPINE GARDEN SOCIETY

The Oldest Rock and Alpine Gardening club in North America
**103rd Year, Newsletter, Number 9**

## *Next VIRAGS Meeting*

## *Tuesday, December 10 6:00 PM*

## Annual Winter Potluck

Bring something to share and join us at Lambrick Park Church!

VIRAGS is a club for plant lovers with special interest in alpine, bog and woodland plants.

VIRAGS in-person/Teams meetings are at 7:30 on the second Tuesday of the month from March to November at Lambrick Park Church, 1780 Feltham Rd. Victoria, BC. Meetings in December-February are on-line only.

## Notes from the Executive

The **Annual Winter Potluck Dinner** is on the program for our December meeting. Bring something to share. There will be a special plant raffle - everybody will be taking home a plant!

The executive recommends that VIRAGS change the by-law of the Society that specifies a quorum for the Annual General Meeting is 25% of the membership. As our membership has grown, this by-law has made it difficult to convene the Annual General Meeting. The proposal is that we set the quorum for the Annual General Meeting as 10% of the membership. As this is a motion to change the by-laws of the society, a 2/3 majority is necessary for approval.

*Notice of Motion*

*Amend article 21(4) to read: At a general meeting, a quorum is ten percent (10%) of the members in good standing, but no less than three (3). No quorum is necessary at a meeting that is not a general meeting.*

## Garden in the Park

*Volunteers meet every Friday from 10:00 to Noon at GITP. New volunteers are always welcome*

*Contact Donna Humphries (donna.humphries@virags.com)*

VANCOUVER ISLAND ROCK AND ALPINE GARDEN SOCIETY PRESENTS

# ANNUAL WINTER POTLUCK

Bring your holiday cheer and join us for a festive evening of sharing and delicious eats. There will be a free plant raffle where everyone goes home with a plant! Come one, come all!

DECEMBER 10, 2024
STARTS @ 6 PM - FOOD @ 6:30
@ LAMBRICK PARK CHURCH
1780 FELTHAM ROAD

www.vigrags.com virags_pics vancouver island rock and alpine garden society

VIRAGS, 3930 St. Peter's Road, Victoria, BC V8P 2J8

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**Erik Fleischer**
**Elizabeth Grant**
**Karen Morrison**
**Colin Tamboline**
**Donna Wong**

## @VIRAGS – President's Blog

### What happened to John Innes compost?

- *Robert D. Burke*

Many gardeners lament the complexity of mixing soils for planting seeds and growing plants in pots. There seem infinite choices of commercial soils and countless recipes, many of which seem needlessly intricate. We all know that different types of plants have different needs, but do we need a special mixture for each type of plant? In the late 1930's there was an effort to simplify the growing media for amateur gardeners and horticulturalists. As many plants have similar needs and most soil mixes have similar components in varying proportions, is it not possible to make a single soil mixture suitable for a wide variety of plants? This was a key premise for the development of John Innes soil mixtures. Horticulturalists at the John Innes Horticultural Institution in the UK set out to formulate a soil mixture that would support growth of a wide range of container grown plants. The soil mixtures that were developed became a staple and for decades gardening books contained reiterations of the recipes. Yet, many modern gardeners have never used John Innes soil and modern gardening books rarely reference John Innes soil mixtures.

The story of the development of John Innes compost is found in a slim volume entitled "Seed and Potting Composts". The book was published in 1939 by W.J.C. Lawrence and J. Newell of the John Innes Horticultural institution describes in detail the development of the soil-based growing media known as John Innes Compost. The authors relate an incident in 1933 in which a crop of *Primula sinensis* that had been grown successfully for 20 years was affected by "wilt". A soil borne source was suspected, so the following year the soil was sterilized as a precaution. The result was poor germination and unsatisfactory seedling growth. Potting composts at the time were idiosyncratic and they had not been systematically investigated. Lawrence and Newell were well aware of the essential and trace components necessary for plant growth and even the principals of hydroponics in which soil itself is not necessary. The focus of their efforts was to remove many of the undefined or difficult to obtain components in use at the time. For instance, builder's rubble (mortar, bricks and plaster) was used in place of lime, and it was a time in which manures were becoming difficult to obtain. Their soil mixture had 3 components, to which they added essential nutrients (nitrogen, phosphorus, and potassium) and trace elements. The main components were humus, sand, and loam. Humus was either leaf-mold (leaves rotted for at least 1 year) or peat. Peat was more uniform in quality and became a principal component. Sand was to be free of clay, silt, shells,

and organic matter, with a maximum grain size of 1/8 inch. Loam is the least well defined of the 3 components. To most gardeners, loam is garden soil, which is predominantly sand, silt, and clay. Light loams contain more sand and heavy loams more clay.

The procedure for preparing loam involves cutting turf from a grassy field. Turfs were to be cut in the spring, turned over, and stacked. Each layer of turf alternated with a layer of "strawy manure" and watered as the layers were built up. The stack was to be about 6 feet high and 6 to 8 feet wide. The turf stack was covered and rotted for 6 months before the resulting loam was harvested. The loam and sand had to be sterilized to destroy weed seeds and pathogens. Lawrence and Newell have a long chapter on optimal times and temperatures for sterilization of the loam and sand mixture - too long or too hot has very unsatisfactory results, but quickly raising the temperature to 82$^{o}$ C for 10 minutes reduces harmful microorganisms, retains some microorganisms, and does not alter inert components of the soil. Fertilizers and lime are added after the soil has cooled. Elaborate devices were designed for sterilizing soil, but it is not difficult to see that producing loam and sterilizing it was something that only a few would undertake. In addition, John Innes compost was intended to be used immediately and had only a 2-month shelf life, further complicating its use.

John Innes composts have not disappeared, they are hiding in plain sight. Modern commercial potting soils are peat and sand supplemented with components other than loam. Loam is replaced with inert matrix materials with a small proportion of humus, or organic matter. The components replacing loam are insoluble materials (perlite, vermiculite, or pumice) with composted green wastes or forest industry by-products. Like the John Innes soils, lime, and trace elements are usually included with nitrogen, phosphate, and potassium being added at point of use. They are formulated to be stable and sterilized to suppress pathogens. The major difference is modern potting mixes tend to have a higher proportion of peat or peat substitute than found in the John Innes composts.

The features of an ideal potting mix enunciated by Lawrence and Newell continue to be the basis for modern commercial potting soils. The principles they thought most important were that soils should permit the entry of air, hold moisture, but permit excess to drain. They also emphasize that materials should be easy to get, cheap, uniform quality, not include animal manure, and methods should be simple. John Innes composts fell from use because loam was not easy to get, not uniform in quality, and the methods complex. However, most modern formulations we buy at garden centres are based on the efforts of Lawrence and Newell to make a soil mixture suitable for a wide variety of plants.

## Miscellaneous News and Announcements

- **Claire Hughes**, is a long standing member of VIRAGS who for many years kept the Garden in the Park in trim shape. Claire was awarded a life membership for her work with GITP. VIRAGS congratulates Claire for recently celebrating her **100th birthday**!

# Plant Profile - *Petrophytum*

*Paul Spriggs*

You know you have a great rock garden plant when its Latin name translates directly as "rock plant". This is the case with *Petrophytum*, of the rose family, often referred to as "rock spirea" or "rock-mat", two highly appropriate names. As its name implies, the natural habitat of this genus is rocky cliffs and crevices so it's a perfect fit for the crevice garden. These little roses feature *Spirea*-like panicles of creamy-white flowers held above congested, ground hugging mats, or, on the case of *P. hendersonii*, small rosette forming bush. These evergreen plants can also handle considerable drought and should be grown in full sun. In gardens they typically reach 18 inches across, but much larger in nature (and only 12 inches for *P. hendersonii*) There are only 3 members of this tiny genus. The rarest is *P. cinerascens*, endemic to just a few isolated populations in the Columbia River gorge of Washington state. Fortunate are those who manage to acquire seed or cutting of this rarity. The most widespread of the genus, and consequently a more easily acquired plant is *P. caespitosum* with its mat of blue-green leaves and drooping panicles on 6-inch stems. Like *P. cinerascens*, this species grows on cliffs so certainly performs best when growing sideways out of a vertical crevice. To save the best for last, we present *P. hendersonii* which differs in habit from the above two in that it tends to form a small green bush of loose rosettes when in cultivation, maxing out at about 4 inches high or less (including the panicle!) a true alpine in nature, it is endemic to the Olympic mountains of Washington state, where it follows cracks and crevices on some of the ranges loftiest summits as high as 6000 ft. All 3 Of the *Petrophytum* species will grow without difficulty in Victoria when their simple needs are met.

*Petrophytum cinarescens (left)* has the most restricted distribution of the genus and is least common. P. hendersonii is the smallest species and found only in cracks and crevices high in the Olympic Mountains. *(Photo credits: Wikipedia and P. Spriggs)*

*Petrophytum caespitosum,* this is the most common of the 3 species in this small genus and is best grown in a vertical crevice.  *Photo credit Kirsten Andersen*

# Rock and Alpine Seeds

*Paul Spriggs*

There has never been a more important time for Victoria's home rock gardeners to propagate and distribute rock and alpine plants. The reason: there are almost no places to buy them anymore! The closest and only commercial grower in Canada is Wrightman's Alpines, based in New Brunswick. Illahee nursery in Medford, Oregon and Far Reaches Farms in Port Townsend, Washington grow alpines but, getting plants to Canada is complex. So, it's largely up to us to ensure that we take the steps required to propagate alpine plants ourselves. Fortunately, its easy and fun!

There are 3 ways to propagate alpine plants; seeds, cuttings, and division. I've come to find seeds to be the best and sometimes the only way to acquire new plants from faraway places. Growing from seed presents its own challenges, but it comes with the greatest reward.

Right NOW is the best time to order your seed to take advantage of the winter chilling period required for many alpines by sowing by late January. VIRAGS will be hosting a seed sowing workshop in Mid-January for anyone wishing to learn the finer points of this rewarding endeavor. I encourage all members of VIRAGS to get into propagating Rock and Alpine Plants from seed in the name of making our gardens (and plant sales) as diverse as they can be!

The first question is always: Where do I get the seeds? Sometimes a bit of searching is required to get what you want. However, this makes finding and growing these rarities so much more special.

**Seed exchanges**. Membership in the organizations is required to participate, but the Scottish Rock garden Club (SRGC), The Alpine Garden Society (AGS) and the North American Rock Garden Society (NARGS) all have seed exchanges. We even have two home grown Canadian clubs that offer the service, The Alpine Garden Club of British Columbia (AGCBC) and the Ontario Rock Garden and Hardy Plant Society.

**Mail order for purchase.** Although mail order seed companies are nothing new, the has made acquiring special seeds a lot easier. This is the best way to acquire some of the rarest and most precious gems of the plant world. It also helps to have some connections who are "in the know" about who is out there collecting the things that are of particular interest to rock gardeners. Fortunately, during my complete immersion in the past decade into all things rock gardening, I have made those connections and for those who are willing to embark on this gardening adventure, I will share them here with you. Propagating rock and alpine plants is fun and once you get the bug, one might even say that it could be addictive.

**Vojtech Holubec** Seed List, Instructions, Order form
**Vladimir Stanek** Seed List
**Wildflower Seeds** Website
**Jelitto seeds** Website
**Alplains Seed** Website
**Turquoise Turtle Plants** Seed List
**Josef Jurasek** Seed List

# Garden in the Park—update:

- *Donna Humphries*

It is no wonder that gardening books advise against creating rock gardens under trees; the past month has focussed on removing leaves from the garden. We finally cleared the garden, but it took several sessions, three leaf-blower batteries, lots of raking, and the collection of downed branches. Thank you to Louise, Enid, Sandra and Mike! While the garden looks good when we arrive, we often remark how much better it looks when we are done for the day – a great feeling of satisfaction. A visit to the garden at this time of year has rewards. The little *Rhododendron*, one of two donated from Al Smith's Garden, has delicate pink blossoms and pungent leaves; I would appreciate knowing its name – perhaps *R. bracteatum*? We transplanted it from one side of the garden to other, as it was not thriving and we are hoping it will show new growth this spring. The *Hakonechloa macra* (Japanese Forest Grass) glows in the sunshine and we hope to plant a couple of more clumps to create visual links across the garden. I was surprized to see the *Armeria* blooming and Mike noted that the *Skimmia* had buds forming, responding to the clearing of overbearing plants.

Before spring, there are some winter jobs we would like to get done: renovate of the old crevice garden by lifting some of the rocks, removing old plants, and replenishing the top dressing; prune and reshape shrubs; continue removing violets and Hairy bittercress (*Cardamine hirsute*) that pops up everywhere, and of course, daydream about what more the garden needs! If you would like to help with any of those jobs, we would welcome you!

Garden in the Park—volunteers and a  few blooms.