June 2019 Newsletter

A perfect summer day is when the sun is shining, the breeze is blowing, the birds are singing – and the lawn mower is broken. ~James Dent

Upcoming

Sept. 10 - Rebecca Cragg will be the speaker on the subject of "Zenscaping: Japanese Gardens."
Oct. 8 - European Gardens. Speaker: Brian Carson
Nov. 19 - Christmas Potluck and AGM - 6:00 p.m. Guest Speaker: Jamie Roy, Acanthus Florals, Almonte, speaking on "Creating a Plant Terrarium."

Summer Garden Tours

We have one garden tour planned for this summer – it will be Richard Catchpaw's Daylily and Hosta Garden for Tuesday, July 16, 2019. The daylilies are spectacular and the variety of hostas are amazing. Address and time to be confirmed at a later date.

We are still working on a tour for August.

OHA District 2 Summer Flower & Edibles Show

Show Theme: ***It's Show Time!***
Held on **August 17, 2019,** at the Civitan Club, 12468 Hwy 15N, Smiths Falls. Hosted by: Smiths Falls Horticultural Society. Show Chairs: Laura Hunter - 613-485-4206 laurahunter611@gmail.com and Kathleen Lang. Design Classes Pre-Registration: Kathleen Lang - 613-667-1265 kathleenlang@storm.ca

The link for the schedule is on the District 2 website.

Happy Anniversary To Us

It's party time. PDHS will be celebrating 35 years as a Society at our September meeting.

Talks and Tours

Announcements From Other Societies in Our Area

Native & Rare Plants in Eastern Ontario
Almonte Old Town Hall,
June 27, 7:00pm - 8:30pm

Horticulturist Peter Fuller will present a slide show and talk about where we can go to find native and rare plants in this region. With decades of gathering and growing these plants from seed at his nursery in Belleville, his expertise on this subject is truly inspiring. Sponsored by the **Almonte and District Horticultural Society and the Mississippi Field Naturalists**.

Lanark Orchid Renals

Perth & District Horticultural Society
P.O. Box 494
Perth, ON, K7H 3G1
www.perthhortsociety.com
District #2 of the Ontario Horticultural Association

Co-Presidents: Linda Bartlett, Madeline Archer • **Newsletter:** Irene Hofmann

Carleton Place & District Horticultural Society is having their **Society Summer Flower Show on Saturday, June 22** from 1:00 to 4:00pm in the Community Room (Upstairs), Mitchell's Independent Grocers, 455 McNeely, Carleton Place

The **West Carleton Garden Club & Horticultural Society** is holding a **Garden Tour** on Saturday, June 15, from 10am - 3pm. Visit nine gardens and a local vineyard. Cost is $20 which includes a Victorian Tea. For more info, please check our website WCGC.ca or email President@wcgc.ca

The **Greater Ottawa Water Garden Horticultural Society** is holding their **11th Annual Water Garden Tour** on June 22 from 9am – 5pm. There will be 11 interesting water gardens for viewing, no two alike. There will also be an evening one-acre garden oasis to visit from 7pm to 11pm. Go to the following link to see information and how to purchase tickets: https://www.ottawawatergardens.com/2019-water-garden-tour.

September Flower Show

Section I: Horticultural Specimen

Class 1: Dahlia – one cultivar – 3 stems
Class 2: Gladiolus – any colour – 1 spike
Class 3: Zinnia – one cultivar – 3 stems
Class 4: Rose – hybrid tea – any cultivar – 1 bloom
Class 5: Rose – miniature – 1 bloom or spray
Class 6: Rose – fragrant - in a bowl
Class 7: Rudbeckia – one cultivar – 3 stems
Class 8: Echinacea (coneflower) – one cultivar – 3 stems
Class 9: Tuberous Begonia – one bloom floating in water – without leaves
Class 10: Any other annual – 3 stems – named
Class 11: Any other perennial – 3 stems – named
Class 12: Collection of vegetables displayed in a basket – minimum 3 kinds – named
Class 13: Garlic – 3 bulbs

Section II: Design

Class 14: Harvest – a parallel design
Class 15; Ferris Wheel – a design
Class 16: Pik'n Plunk – roadside/wayside finds arranged in a vase

Potato Towers

Dale Odorizzi
Master Gardener of Lanark County

Over the past few years, many gardening product companies are touting Potato Towers. These towers allow you to grow all the potatoes you need by planting only one plant. You simply plant your seed potato in the bottom of the container and continue to add soil in layers as your potato grows. It is essentially extreme hilling—you add 60-75 cm of soil instead of the typical 10-15 cm. In theory each additional layer doubles the yield. At the end of the season, you take the tower apart and hundreds of pounds of perfect potatoes tumble out at your feet. The only problem is **IT IS NOT TRUE!**

There is no research, scientific or otherwise to support this idea. Now, you can grow potatoes in a tower. You will get a good yield in a tower. You just won't get better results than growing them in the more conventional way. Hilling your potatoes beyond 15 cm brings no benefits and may reduce yield. Potato yield is limited by foliage area, not the amount of soil above the tuber. Conventional container growing works fine but potato towers do not work as claimed.

New OHA Editor Sought

The OHA is currently seeking a new editor for the organization's quarterly newsletter. Essential skills include a proper knowledge of rules of grammar, spelling, word usage, and typography. Good design abilities and demonstrated skill with software used for page layout are also required. Although not mandatory, it is highly recommended that the Trillium editor have access to a good proof-reader.

Currently, the deadline dates for copy are December 15 (winter issue, with publication at the beginning of January) March 15 (spring issue), June 15 (summer issue), September 15 (autumn issue). Winter and spring issues are usually 24 or 28 pages. Summer issues, which contain pre-convention material are 28 to 32 pages. The autumn issue, which includes a convention summary and the results of the convention competitions, may have as many as 44 pages. The successful applicant will have the support of the current editor to ensure a smooth transition. Applications should be emailed to OHA Secretary Kelly Taylor at secretary@gardenontario.org. Please include a one-page synopsis of your qualifications. There is a

small honorarium with this position.

Pre-sprout For Easier, Earlier Carrots

By Larry Hodgson

You're tired of waiting and waiting and waiting for carrot, parsnip or parsley seeds to sprout (they can take up to 3 weeks when sown directly in the garden)? Or they simply don't come up at all or only here and there (usually because the soil was too moist, too dry, too hot or too cold)? If so, try pre-sprouting them. Safely indoors, under controlled conditions, you can give the seeds the stable warmth and humidity they want and avoid Mother Nature's volatility.

True, it's an extra step, but in return it shaves a week to two weeks off the time to harvest, improves germination (by about a third), eliminates all need for thinning and helps fragile seedlings avoid pests and diseases. But you do need a good eye: reading glasses may come in very handy!

I remember a few years back when none of the other gardeners in my community garden had any luck with carrots that year: for whatever the reason, the garden-sown carrots just didn't come up in spite of repeated attempts. Wasn't I smug with my boundless supply of healthy carrot plants I had pre-sprouted!

One Technique Among Many

There must be dozens of techniques for pre-sprouting (also called priming) carrot seeds (and, I repeat, their relatives parsnip and parsley). Some people even paste them to strips of toilet paper before they prime them, strips that can then be used as seed tape, but that's a hassle.

Here's what I do:

1. Place a baking rack in the bottom of the kitchen sink.
2. Take a paper towel and cut or fold it so it'll fit into a zip-lock bag.
3. Place the paper towel on the rack.
4. Lightly spread carrot, parsnip or parsley seeds on the towel.
5. Rapidly pour boiling water over the seeds. Yes, boiling! No, it won't hurt the seeds, as the heat won't have time to penetrate, but it will soften the hard cuticle that covers the seeds and slows their germination.
6. You'll need to allow the excess water to drain away, so let the paper towel sit for 15 minutes or so, until it's slightly moist, not dripping wet.
7. Carefully insert the paper with the seeds on it into a zip-lock bag, then seal it.
8. Lay the sealed bag on a heating mat designed for seed sowing or somewhere warm (about 70 to 80 °F/21 to 27 °C). The spot can be in moderate light or in darkness, but never in full sun, where it could get too hot.
9. When you see the first signs of sprouting (usually in about 3 days), just a bit of white showing, use tweezers or a pencil tip to carefully to move the seeds to the garden, spacing them about 2 to 3 inches/5 to 8 cm apart, barely covering them with soil.
10. Water thoroughly but carefully (use the rose attachment on your watering can or set the hose nozzle to "spray" to break up the force of the water) and keep moist.

The seedlings will be up and growing vigorously in just a few days. This method works with both early spring sowing and successive sowings in summer.

The How And Why Of Plant Colour

Dr. Leonard Perry, Horticulture Professor
University of Vermont

While some now grow flowers for pollinators, the main reason most of us grow flowers is for the colours of blooms and sometimes leaves. What imparts color to leaves, flowers and fruits, and why these are in various colors, may seem simple on the surface but really is more complex.

The color that you see in flowers is actually the result of reflected light from various chemical compounds called "plant pigments." Before humans were interested in these for the aesthetics they impart—flower, leaf, and fruit colours—they used pigments for dyes such as indigo, and herbal medicines. There is still some use of these for dyes in crafts and natural art, but also in dietary supplements. Pigments more recently are being studied for their antioxidant health-promoting properties. Some may inhibit bad cholesterol, prevent blood from clotting, and help to prevent cancer in cells.

The real role of colour in plants, flowers in particular, is not for humans but for their ecological roles. Plant colours serve to attract insects,

birds, and animals for both pollination and seed dispersal. Often what they see in colors is different from what we see. Forget-me-nots (Myosotis) or other members of the Borage family, as well as some other flowers such as larkspur (Delphinium), change color between pink and blue. This usually indicates to insects that a flower has aged and is past pollination, so move on.

There are three main groups of plant pigments. "Anthocyanins" are a group of flavonoid chemicals (phenolic compounds) that are responsible for many colours, from orange and red to violet and blue. Scientists have identified over 300 different anthocyanins which occur in nature. Colourless (to us) flavonoid pigments, and their flavonol versions, absorb ultraviolet light so they are readily seen by insects—a pollinator cue of some flowers.

Anthocyanins are composed of anthocyanidin chemicals to which sugars are attached. These chemicals may sound familiar, as they're named after flowers in which they're found. Delphinidin imparts the blue color to delphinium, as well as to violas and grapes producing Cabernet Sauvignon wine. Malvidin imparts blue to the flowers of some primroses, is the main pigment in red wines, is found in perennial geraniums and petunias, and of course is in mallows (Malva). Pelargonidin is of course in the red annual geranium (Pelargonium), as well as in many red fruits from strawberries to raspberries and cranberries. Purplish-red colors in peonies are from peonidin. Dark red or purple in grapes, Saskatoon berries, Indigo rose tomato, and of course petunia is from petunidin.

It is these anthocyanidin pigments that biotechnologists are studying to change flower colours. For instance, they've taken the scarlet pelargonidin-producing gene from corn and placed it into petunias to give this flower a novel orange color. The gene for delphinidin has been placed into carnations to make some blue. Other factors within the cell, such as the acidity (pH) and even cell shape, are making the genetic production of blue mums and roses a bit more challenging.

Roses are red, and some potatoes blue, due to anthocyanins. Fruits with the highest levels of anthocyanins include black currants, black raspberries, blackberries, cherry, elderberry, some red grapes, and wild lowbush blueberries. Red cabbage and eggplant also are high in anthocyanin. Many of the new brightly-colored sweet peppers owe their colors to anthocyanins. While plant colours often attract animals and insects, in some plants anthocyanin pigments may deter herbivores (plant-eating animals).

A second group of plant pigments, the "carotenoids", are terpenoid chemicals. They are responsible for yellows, oranges in carrots (a good way to remember carotenoid), and reds in tomatoes. The specific carotenoid in most red tomatoes is lycopene, named from the scientific species name. Carotenoids absorb wavelengths of light that chloroplasts (those parts of plant cells where photosynthesis occurs) can't. They also may protect plants from damage caused by both ultraviolet and visible light—think sunscreen. The two main groups of carotenoids are the "xanthophylls" and the "carotenes". The latter are what make cantaloupes and carrots orange.

The term xanthophylls comes from the Greek words for yellow (xanthos) and leaf (phyllon), and are the main yellow pigments found in leaves. They are present during the season but masked by the green chlorophyll, except in plants that may be stressed or with yellow leaves normally.

A third group of plant pigments are the "betalains", composed of those that appear reddish to violet, and those that appear yellow to orange. This group is much less commonly found in plants than the first two groups of pigments, primarily found in the group of plants – Caryophyllales – containing dianthus, cacti, and beets (hence the pigment name) where it replaces anthocyanin.

Many flowers may not change colour on an individual plant but may change colour, even if slightly, among locations or various conditions. Temperature affects colour, hence, there are often more vivid colors in cool northern gardens than hot summer ones. Plant stress, such as from drought, insect attack, or plant nutrition (too much or little) also can cause different levels of pigments in flowers, and. as a result, different colours. If a plant doesn't appear to have the colour leaves or flowers that it should, consider these factors.

"Summer is a promissory note signed in June, its long days spent and gone before you know it, and due to be repaid next January."

- Hal Borland