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Getting a Head Start on the Summer Growing Season

Rob Stuart

Mid- March in Ottawa is usually the ideal time to start sowing seeds of annual flowers, vegetables and herbs that you plan to grow this summer. Hopefully you already have the seeds ready, either saved from last year's harvest or purchased at a local store or via an on-line retailer.

Each seed package will contain instructions on when to sow your seeds, relative to the average last frost date in your area, the temperature in which to place your pots, how much soil you should use to cover your seed, as well as approximately how long it will take for them to germinate and start growing. Every package of seed will contain different instructions depending on the type of seed.

Many vegetable plants are either annuals, such as tomatoes, peppers and corn, or biennials, such as carrots, beets, and parsnips. They will either grow fruit in their first year (tomatoes, peppers and corn) or produce edible roots as is the case with carrots, beets, and parsnips. The fact that they are biennials is not really important to us for the purpose of the harvest, so we treat them as annuals. Generally, perennial vegetables such as asparagus, or fruits like raspberries or strawberries, take more than one year after sowing before they can be harvested.

Lanark County Master Gardeners



Head Start on the Summer Crowing

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Garden calendars and other information sheets

You Know You're a Gardener When...

"You find yourself talking to the plants. You praise, question, marvel at, scold, and give ultimatums, which sometimes even work!

Ottawa-Carleton Master Gardeners

Josie F





Annual flowers such as sweet alyssum, cosmos or petunias will flower the year they are sown and will die in the fall. Seed can be collected and sown again the next spring to repeat the cycle. Be aware however that some of the original plants may have been hybrids and their offspring may look very different from the parent plant.



Annuals in a cutting garden *S. R. Bicket*

Sowing Your Seeds

Many gardeners decide to purchase garden-ready bedding plants at nurseries or large box stores. Those who want to start their plants from seed should make a few preparations ahead of time, since sowing and germination are just the start of the care needed.

While you may be able to place your pots of sown seeds on a window sill, it is generally a much too cool environment to get good germination. If they do germinate, you'll need to turn the pots a quarter turn each day to ensure your seedlings are evenly exposed to light and are growing straight. That requires a lot of care and attention. Additionally, the cool temperatures on a window sill will tend to slow the growth of your plants, which could delay the date you can transplant them into the garden. Some plants such as cabbage, broccoli and Brussels sprouts do like to grow in cooler conditions, but tomatoes, peppers and eggplants prefer consistently warmer temperatures. Placing your pots in a warm

Ask a Master Gardener

Compiled by Amanda Carrigan Master Gardeners answer helpline questions.

I started seedlings indoors, and I'm seeing some little bugs flying around near them. They look sort of like fruit flies but I don't think they are. Are they going to harm my seedlings? How do I get rid of them?

I think these are fungus gnats. They do look like fruit flies, but they are more interested in your houseplants than fruit. More specifically, the adults and larvae like decomposing organic matter (such as mulch or compost), soil fungi, plant root hairs, and decaying wood.

They may have arrived via an infested houseplant or bagged potting mix. If they have other organic matter to eat, they are probably not going to attack your seedlings, unless you have been overwatering them. They like damp soil, which might also have fungi and decaying roots for them to eat. There is also some evidence that more fungus gnat eggs will survive and mature to adults in growing media containing compost and/or fungi because of better water retention.

Even if they don't directly damage your seedlings, they can carry fungal diseases such as dampingoff, which could be harmful. It's a good idea, therefore, to control fungus gnats around your seedlings.

Yellow sticky traps can be used near your seedlings to decrease the population. Discourage fungus gnats further by mixing some light gravel or vermiculite into the potting mix to increase drainage. Spread a light layer of gravel on top of the soil, making sure to let the top layer of soil dry out between waterings. spot in the house, on top of a heat mat or under grow lights, creates optimal conditions for germination.

Growing Requirements and Transplanting

Needless to say, unless you are planning on growing just a few plants, you'll need an appropriate set up. A table-top with grow lights above will ensure your plants have warmth and light. Depending on the type of grow lights you plan to use, you may require some type of 'stand' on which to insert your lights, or 'suspend' them from the ceiling. Ideally your system will allow you to adjust the height of the lights. This way, as the plants grow, you can raise the lights to prevent burning of the leaves. If you don't have a large tray on which to place your pots, then you can place individual saucers under each one, which requires more work.

Your plants will need to be transplanted from the seed pots into individual, larger pots once they reach about 10-15 cm in height. Typically, the first individual pots would be about 7 cm square and about the same depth. Use soilless potting mix which tends to be disease and insect free and is ideally suited to growing healthy young plants. As your plants grow, make sure that they are watered as needed. Usually, it is safe to water when the top 1 cm of soil in each pot is dry, then water thoroughly.



I would really love to have homegrown tomatoes from my garden. When I've tried in the past, they haven't produced much. The vegetable garden is on the south side of the house, but I think it's getting too much shade from the building next door on that side. There are large trees (not ours) on the north and east sides of the property, so the only full sun area is right beside a busy road on the west side. I don't really want to plant vegetables there. Is there anything I can do, or will I have to give up on tomatoes?

Your site doesn't sound too promising, but there are a few things you can try. People have managed to grow tomatoes in part shade and get a decent harvest. That said, tomatoes in part shade are unlikely to produce as well as those in full sun.

Presumably, you get at least some sun on that south side? Pick the sunniest spot. If possible, plant your tomatoes near a light-coloured wall or fence, which will help reflect light and brighten the area. If you are ambitious, you could also grow your tomatoes in large pots, moving them to catch the sun.

When light conditions are less than ideal, tomatoes grow and mature more slowly. You will want to decrease the amount of growth needed before you get ripe tomatoes. For that reason, try varieties of tomatoes that make smaller plants. Tomatoes labeled as 'patio', or 'bush', for example, are good choices. Look for varieties that need a shorter growing season, based on the 'days to maturity' or 'days to harvest'. This information can be found on seed packages and in catalogues. Tomato varieties' needs can vary significantly, ranging from about 55 days to over 80.

You can also give them a good head start also by starting them early indoors. Once moved to outside, make sure they have good fertile soil, good air circulation, and adequate water. With any luck, you should get some homegrown tomatoes to enjoy!

Rob Stuart

As your plant outgrows its small pot, it is important that you transplant it into a bigger one, no more than an additional 2.5 cm in diameter. A much larger container will create an environment that will stay too wet for too long. The plant will be too small yet to use the water quickly enough which will likely cause the plant roots to rot.



Rob Stuart

With respect to fertilizer, you should use a halfstrength water soluble 20-20-20 fertilizer every couple of weeks once you move your seedlings into their own pots. Depending on the rate of growth and the weather outside you may need to transplant your plants again. Only do this selectively as required.

Hardening Off Your Plants

As you get closer to the day when you will put your plants out into the garden, you will need to prepare for this event by hardening off your plants. This means exposing them slowly to outside temperatures and light conditions. You should do this over a period of about two weeks, initially putting your plants out in the shade for a few hours a day. You'll need to bring them into the house in the evening or whenever the temperature might drop significantly. Make sure you extend the amount of time outside and the amount of sunlight they are exposed to on a daily basis. A couple of hours per day is generally sufficient.

Eventually, you should be able to keep your plants outside through the day and night. Then they will be ready to plant out after the average last frost-free day of the spring. Generally, this is about May 10, but will vary based on whether you live in the city, the suburbs or the country. Ideally, choose a cloudy day to put out your plants into the garden, water them well and cover them with a floating row cover to protect them from a late unexpected frost, if necessary. This is particularly important for your tender plants such as tomatoes, peppers, zucchini, and annual flowers such as impatiens, petunias, begonias and dahlias.

Water regularly as necessary– at least 2.5cm of water per week– including both rain and irrigation. Apply a compost mulch to reduce water evaporation, release nutrients slowly into the soil and reduce weed germination. With these steps, you'll be well on your way to a successful summer gardening season. 🛞

There are two seasonal diversions that can ease the bite of any winter. One is the January thaw. The other is the seed catalogues -Hal Borland naturalist, writer



Giant Swallowtail—*Papilio cresphontes S.R. Bicket*

Keystone Plants: Trees – Ecoregion Five

Adair Heuchan



Oak R. Heuchan

(This is the second of a four-part series on keystone plants in our ecoregion.)

"Oaks support more forms of life and more fascinating interactions than any other tree genus in North America. They produce enormous root systems over their lifetimes, and these help make them champions when it comes to soil stabilization, carbon sequestration, and watershed management." -

Douglas Tallamy: The Nature of Oaks - The Rich Ecology of Our Most Essential Native Trees As we learned in the first of our 4-part series on "keystone plants", Doug Tallamy and his team of researchers at the University of Delaware have systematically studied which trees, shrubs and plants are keystone hosts for caterpillars and other species. Their findings reveal that *Quercus* (oaks) are, without doubt, the number one keystone tree species. Oaks are spectacular hosts for several reasons. They are dispersed very widely across the planet. Their size and spread above and below ground are vast. They live to a very old age. As a result, insects, birds and other animals have had centuries to adapt to using oaks for their sustenance.

In North America, there are over 600 genera of oaks which host 557 species of insects, birds and animals. In our Ecoregion 5, Lake Simcoe - Rideau, we can readily grow varieties of white and red oak including pin and bur oaks. Oaks, like other trees, take a very long time to grow to any great size and can therefore be planted in suburban and even urban lots. Ensure that there is enough room between your oak and any permanent structures, such as a house or shed, to accommodate at least half the width of a mature tree. For example, a red oak, which can grow to 18 m (60 feet) in width, should be planted at least 11-12 m (35-40 feet) away from your house.

Your yard may be a bit small for an oak but you can make a great contribution to our wildlife and nature by helping to protect oaks growing in public spaces and encouraging our municipalities to plant more oaks.

Several other trees, which are not as "mighty", are also extremely valuable. *Prunus* trees, including plum, black cherry and chokecherry, host 409 species of caterpillars. The genus *Betula*, including yellow birch and paper birch, hosts 385. *Populus*, including the American aspen and the balsam poplar, host 337 varieties. *Malus*, including crabapples and other apple species, host 285. *Acer*, including silver, red and sugar maples, host 276. *Salix*, the willows, host 397.

But you needn't be restricted to these top keystone plant genera. Many trees host more than 100 species of caterpillars. In our zone, these include: *Alnus* (alder), *Pinus* (pine), *Ulmus* (elm), *Picea* (spruce), *Crataegus* (hawthorn), *Tilia* (basswood), *Fraxinus* (ash), *Juglans* (walnut), *Fagus* (beech), *Castanea* (chestnut), *Abies* (fir), *Cornus* (dogwood), *Larix* (larch), *Amelanchier* (serviceberry) and *Tsuga* (hemlock).

Exotic trees, such as *Magnolia* and *Ginkgo*, do not contribute much to the wildlife in our zone, hosting fewer than 5 species each, although they might well host more in their own native zones. Nevertheless, they are beautiful and do add some minimal value, so leave them if they are healthy specimens already in place. It is better, however, to choose a native keystone genus if replacing or planting new trees.

Take a look at your environment - your street, your neighbourhood and any parks or open spaces nearby - to see what trees are already present. Think about diversity and look at your own garden - front, back, side or even a median in front of your house. See if there is room for a tree. If so, choose a keystone tree which adds to the biodiversity of what is already there, and which suits the location, sun and soil conditions. If your space is small, an *Amelanchier*, the hardy native serviceberry tree, or *Cornus alternifolia*, the pagoda dogwood, might work for you.

Serviceberry is a small tree (or shrub) in the rose family, native to temperate regions of the northern hemisphere. Although it is tolerant to a wide variety of conditions and largely disease resistant, it is best to plant it in full sun or partial shade in well drained soils. A serviceberry tree can live up to 50 years and grow to 3-6m (10-20 feet); however, annual pruning will keep it small. The roots grow slowly and are not invasive to foundations.

in early spring making it a great source of nectar for pollinator insects early in the season. The blossoms resemble apple blossoms. In summer, it produces beautiful deep red and eventually purple, edible berries much loved by all kinds of birds. If you can harvest before the birds eat them all, the berries can be eaten raw or made into jams, jellies and pies. The serviceberry foliage structure is open and loose allowing for dappled light to filter through to semishade loving plants below. In autumn, the leaves of the serviceberry turn to vivid oranges and reds.

Pagoda dogwood is a deciduous shrub or small tree native to eastern North America. It prefers partial sun and a moist well-drained location with a rich soil that is somewhat acidic. The pagoda dogwood is, however, adaptable to other conditions and is low maintenance. It can live for up to 80 years but more realistically, in our gardens, for around 30 years. Pagoda is the most cold-hardy dogwood in North America. Although this dogwood can grow tall, it does not have invasive roots and can be kept trimmed. Pagoda spreads sideways and looks spectacular by itself or as an understory to a larger tree and/or umbrella to shade-loving plants.

The pagoda dogwood's fragrant white flower clusters in spring are followed by dark blue berries on red stems and spectacular bright red leaves in autumn. Even in winter, the pagoda has interesting bark. And all year long, it provides food and shelter to a wide variety of insects, birds and other creatures.

I conclude with a short verse, whose title is a misquotation from the movie "Field of Dreams".

If You Plant it, They will Come! A star you will be If you plant a tree. This is not a joke! Consider the mighty oak, Maple, willow or choke, Apple, plum or cherry, Or plant any bush of berry. For hosting the young of our native species Of butterflies, moths and specialist beesies. *

A serviceberry displays gorgeous white lacy blooms

Gardening for Birds: Planting for Owls

Julianne Labreche



Barred Owl with prey Joanne Lacroix



Barred Owl resting Joanne Lacroix

Tip: Check out the <u>City of Ottawa's bird-safe de-</u> <u>sign quidelines</u> that provide directives to prevent bird-glass collisions. They are based on a review of similar policies in other major Canadian cities. Also check out: <u>https://birdsafe.ca/</u> That winter's night when a snowy owl perched in the boughs of my old crabapple tree will long be remembered as a magical moment for this gardener. Under a full moon, perhaps it was looking for mice or voles? These small mammals sometime emerge at night in my garden to forage for seeds at the base of my bird feeder. The large white bird with haunting yellow eyes stayed awhile, and then flew away– a rare sighting in this well-treed neighbourhood.

Owls are fascinating birds with their huge eyes, keen sense of hearing and silent flight patterns. They are also hard to spot, being usually nocturnal and well camouflaged. Most often, they are usually first heard with their recognizable 'hoot'.

Snowy owls, like the one that visited my backyard, migrate far north in spring to the Arctic regions of Canada and Greenland to breed. They are diurnal feeders, meaning they tend to feed during the day, and are most commonly seen in our region during winter months in more open landscapes, such as farmers' fields.

Eleven different owl species live in Ontario. These are: northern saw-whet owl, barn owl, great horned owl, long-eared owl, short-eared owl, eastern screech-owl, snowy owl, northern hawk owl, barred owl, great gray owl, and the boreal owl. One of the more frequently spotted owls in the winter months is the barred owl. This large, gray-brown and white owl with brown eyes inhabits wood-land areas and is sometimes spotted in wooded gardens.

Owls eat large insects in their diets, including moths and beetles, as well as small animals such as rodents, including mice, voles and squirrels, and rabbits and sometimes smaller birds. To attract owls to the garden, it's important never to use pesticides of any type that may wipe out their prey. These poisons can be passed along to the birds directly or indirectly, called secondary poisoning, through their



White spruce Julianne Labreche



Canadian hemlock Julianne Labreche

diet. Either way can be lethal.

It's also important to turn off your outside lights because they interrupt the natural flight patterns of these night-flying birds.

Owls will benefit when you postpone your fall garden clean up, leaving the leaves for over-wintering insects and wait until spring to clean up the yard. These garden practices will help to provide them with food. In addition, making a brush pile will offer overwintering protection for the owl's prey. Less manicured grass in your yard will provide them with a desirable habitat for prey-species. Planting your garden in layers, in varying heights, from tall trees down to shrubs and perennials, will provide biodiversity and support owls, as well as many species of birds.

Many owls prefer to roost during the day and seek protective cover in evergreen trees. To attract owls to your garden, try growing these native trees:

Red Pine (*Pinus resinosa*) – This large-sized evergreen prefers full sun. It will grow in a variety of soil types including clay, loam, and coarse sandy soil. It prefers well-drained soil.

White spruce (*Picea glauca*)– This large evergreen also prefers full sun. It grows in clay, sand, loam and coarse soil, preferring well drained soil but will also grow in dry or moist soil.

Eastern Hemlock (*Tsuga canadensis*) – Ottawa once had extensive areas of hemlock growing as forest. This medium to large tree prefers cool, shady, moist conditions and grows in clay, loam, sand, organic or coarse soil. 🛞

Suggested Reading:

The Wise Hours: A Journey Into the Wild and Secret World of Owls. By Miriam Darlington ISBN-10: 195353483X, ISBN-13: 978-1953534835 Tin House. 302 pp. This recently released book is a recommended read

about owls around the world. It was written by a British nature writer who spent a year in various countries studying them.

In the Alcove Garden: Native Plant: *Aquilegia canadensis*, syn. of *A. formosa*

Candace Dressler



Aquilegia canadensis Candace Dressler

Common names:

Canadian columbine, Eastern red columbine, wild columbine, cluckies, rock bells **Family name:** Ranunculaceae (buttercup) **Height**: 30 - 90 cm **Spread:** 30 cm Small neat clumps. **Type of plant:** Native perennial, herb

CDA hardiness zone: 3-7

Identifying characteristics:

Leaves: Alternate lobed fern-like and grouped in threes

Flowers: Mid May – early June. 5 yellow petals with red spurs and sepals.



Aquilegia canadensis Candace Dressler

Stems/roots: Slender stems on fine roots that do not like to be disturbed.

Seed: Small round black in pods. Sow by breaking ripe seed pods and scattering on the soil surface, they need light to germinate. Plants will start to flower in their second year.

Other characteristics: A good plant for rock gardens. Deer and rabbit resistant.

Propagation and control: Propagates by seed, needs cold stratification. It will hybridize readily with other nearby aquilegia. It is difficult to divide or transplant mature plants. Best results come from starting from seed.

Seasonal colour: Early spring colour. **Culture:** Dry sandy or gravelly woodland soil. Landscape use: part – full shade woodland Native country: Eastern Canada, Mexico and USA Caterpillar host for: Columbine duskywing (*Erynnis lucilius*)

Canadian columbine is a Royal Horticultural Society (RHS) Award of Garden merit winner. It is the first red perennial flower of the year in my garden. Just as the tulips start to wind down, the bright red and yellow flowers of the columbine start to shine in the partly shaded section of my woodland garden.

These perennial plants, while a bit tricky to get established, will self-seed and create a small colony of neat clumps close to the front of the woodland beds. While researching this article, I found sites that said it was a shade plant and others that said it was a sun plant. In my garden, it gets 1 -2 hours of sun per day under a maple tree and it is very happy. It will flower best in areas where the soil is not too rich. If you want it to spread, do not use mulch around it. As with many other plants, this one has several names but World Flora Online (WFO) states that the name is *Aquilegia formosa*, and that there are 28 synonyms. There are so many names for a single small flower. \circledast

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Garden groaner



Find us:



Helplines - are monitored daily Send questions and photos of garden pests, diseases or plants for Identification.

Trowel Talk can be found on the <u>Lanark County</u> <u>Master Gardener's blogsite</u> and Ottawa Carleton Master Gardener's Website <u>https://mgottawa.ca/</u>

Article suggestions box

This is your chance, as a reader, to suggest an idea for an article you would like to see in Trowel Talk. Click on the button.



Trowel Talk team:

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Letters to editor: <u>newsletter@mgottawa.ca</u> Banner Photograph: Foxglove seedlings. S.R. Bicket.



Ask a Master Gardener, face to face, gardening questions.

Ottawa Home and Garden Show

Thursday 23 to Sunday 26 March 2023, <u>see web-site for details</u>

Richmond Market Saturday 1 April 2023, 10:00 am—3;00 pm



For information on gardening in and around the Ottawa valley: <u>https://gardeningcalendar.ca/</u>

Talks given by Master Gardeners for garden clubs and horticultural societies. If you wish to attend please contact the host organization to confirm venue. Zoom or other virtual meeting software is still in use by some societies.

Friday, March 24, 1:00 pm – 2:00 pm Rebecca Last **The Dry Run (an exploration of dehydration)** Ottawa Home and Garden Show – EY Centre

Saturday, March 25, 12:30 pm – 1:30p m Nancy McDonald **Culinary Delights with Herbs and Edible Flowers** <u>Ottawa Home and Garden Show – EY Centre</u>

Tuesday, April 4, 7:30 pm Claire McCaughey **Gardening Basics** <u>Kanata March Horticultural Society</u>

Tuesday, April 4, 2023, 7:00 pm **Getting Started, Taking Stock** Rebecca Last <u>Friends of the Farm</u> Lecture series, via zoom

Wednesday, April 5, 7:00 pm Mary Shearman Reid **Vines and Climbers** <u>Greely Gardeners,</u>