

Cross Pollination

Newsletter of the Halton Master Gardeners



October Garden To Do List

- ❑ **Perennials** - [Divide or transplant overcrowded or underperforming perennials](#) as the weather cools & water in the new divisions well. Leave perennials uncut.
- ❑ **Lawn, Leaves & Weeds** - Rake or "mow" leaves and remove to garden beds. Leave some [leaves uncut for beneficial insects](#) and pollinators who overwinter in leaf litter. Keep on weeding as long as soil is workable. When mowing is done for the season, sharpen lawn mower blades and clean mower.
- ❑ **General Clean up** - shed, garage, patio, garden etc. Donate unused tools & repair, recycle or throw away broken items. Drain & store hoses & turn off water supply. Clean & store/cover pots, watering cans etc. to prevent cracking during freeze up. Cover ponds with netting before leaf fall or remove leaves in pond with a bamboo rake.
- ❑ **Feed the Soil** - Empty your compost bin into gardens and cover bare soil with organic matter such as compost, leaves, straw, mulch or manure.
- ❑ **Bulbs** - Continue to plant spring flowering bulbs such as crocus, tulip, hyacinth & daffodil now, until before freeze up of soil. Water bulbs after planting. Please do NOT plant [Scilla](#) as it is now on the [Category 2 Highly Invasive](#) list!
- ❑ Dig [tender bulbs](#) like dahlias, caladiums, cannas and tuberous begonias. Clean, dry and store in a cool, dark, frost free area.
- ❑ **2021 Butterfly Garden** - Prepare containers for [winter sowing of seeds](#). Chose plants that are [larval hosts](#) to butterflies like milkweed, white turtlehead (*Chelone glabra*), ox-eye sunflower (*Heliopsis helianthoides*), black-eyed Susans (*Rudbeckia* spp.), and coneflowers (*Echinacea* spp.) **Young Trees** - To reduce sun scald, mulch young trees with wood chips. To reduce rodent & rabbit damage, use spiral tree guards & trim grass around tree.
- ❑ **Seeds** - Continue to collect seed for next year's garden.
- ❑ **Houseplants** - Decrease watering as the days become shorter. Increase humidity by misting plants. Check for pests weekly.
- ❑ **Garlic** - plant end of October until ground freezes. Complete [details here](#)!
- ❑ **Invasive plants** - Target [Category 1 list](#) [invasive plants](#) such as [periwinkle](#), [Japanese honeysuckle](#) & [goutweed](#) for removal. Replant with suggestions from [Grow Me Instead](#) or [Alternative Plants for Invasive Species](#).
- ❑ See our [September newsletter](#) for any garden jobs that you may have missed!



Larvae of the Great Spangled Fritillary butterflies overwinter in leaf mulch. Photo: GrowVeg



Leave perennial flowers uncut for the birds, insects and for winter interest.
Photo: Donna Bos MGIO Facebook Group

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Seed Collection of Native Plants

Brenda Van Ryswyk – Terrestrial Ecologist, Conservation Halton

Last winter several Halton Master Gardeners had the opportunity to volunteer with Conservation Halton to assist Brenda Van Ryswyk, an ecologist, to prepare native seeds for distribution at community events. One of the best ways to begin adding native plants to your garden is to collect your own seeds. Thank you to Brenda for sharing this information.



Fall is the time to collect native seeds – but be sure to leave some to re-seed for next year's growth as well as enough to feed wildlife.



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Collecting Native Seeds

- If collecting from a garden then feel free to take all or what you need, however it is great to leave some for birds and other wildlife to eat in the winter.
- Never collect more than 10% from a native wild population.
- If collecting from a planted (restored) site where the seed will be used for further restoration, then more than 10% can be collected, but do not collect more than 50%. Enough seed must be left to re-seed and for the wildlife to eat.

Collection Timing

- Collect seeds only after they are fully ripe.
- Wait for the stem with the seeds to fully go brown and dead.
- For some species you should wait until after a hard frost (many of our native grasses, and mountain mints especially!)
- Seeds should fall off or come out of the seed head easily.
- Seeds should have no green (ripe seed is most often dark brown or black, but some species have light brown or white seed) and be fully hard and dry.



Using paper bags for seed collection allows the seed to dry out.

Document!

- Always keep track of the species, location and year
- Write this information directly on the collection bag or on a piece of paper to go into the bucket with the seeds.
- Seeds should be shared within its geographic range, strive to keep seed as local as possible. (Seed from Windsor will not grow well in Kingston, collect near where the seed will be grown).

Cont'd on next page.

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Seed Collection of Native Plants – Cont'd

Brenda Van Ryswyk – Conservation Halton

Brenda's Collection Methods

- The method used to collect the seed will depend on the seed type/species you are collecting.
- Always try to collect only one species at a time and do not mix species (unless you want that mix for reseeding at the restoration site.)
- It is best to collect after things have been dry for a few days to ensure seedheads are dry. Wet seedheads do not yield up their seeds well at all.
- I typically will use a clean bucket or paper bag. I grab a seed head, tip it into the bucket/bag and give it a good shake.
- A hard sided bucket works best for species like Monarda and mountain mints as they have fairly hard seed heads with small seeds inside small tubes.
- Fluffy seeds like asters and goldenrods, I will shake into a bucket or a bag but often find holding the stems with one hand (with a bag over the inflorescence) and flicking a finger against the portion in the bag works quite well.
- Fluffy seed must be thoroughly dry before picking.
- Sometimes I collect asters by hand; plucking each seedhead off one at a time. This works well as sometimes asters grown in mixed bunches and picking by hand ensures I get only the species I want. I do this for New England Aster especially since it sometimes 'hangs on' to its seed a bit. It also has nice dense flowers so I can pluck quite a few seeds with each pick.



- Careful collection also means there is less chaff in with the seeds.
- For some species such as Echinacea you will have to clip the entire seed head and work to get the seeds out by breaking it apart.
- When possible collect in paper bags, and always transfer bucket collected seed to a paper bag as soon as possible. Paper 'breathes' and allows air flow. This is vital for the seeds to continue to dry after harvest. Seed stored in plastic will often go rotten, or have its viability lowered. For seed that is moist at time of collection lay it out in a thin layer on a piece of cardboard or newspaper for at least a few days to allow it to dry out.

NEXT MONTH: CLEANING AND STORAGE OF SEEDS

Brenda Van Ryswyk grew up in the rural areas south of Ottawa and has been working with Conservation Halton for over 15 years as a Natural Heritage Ecologist. Her main job responsibilities include plant and wildlife inventories which is a great match for her love of the outdoors. Also an avid gardener, she has begun to promote the concept that our backyard landscaping can be functional (benefit our local wildlife) as well as beautiful. This means you can have a traditional looking home landscape while incorporating native plants. Being a bit of a research junkie, she is happy to share what she's learned and encourage others to do what they can to help local bees and butterflies.



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Spotlight on Beneficial Insects
Create the right habitat & They Will Come!

Hariette Henry - Halton Master Gardener

Dragonflies and Damselflies belong to the order [Odonata](#), an order of flying insects that mostly evolved in the early Mesozoic era. Dragonflies reside in the suborder Epiprocta and damselflies in the suborder Zygoptera.



Common Whitetail Dragonfly
Plathemis lydia
Image: iNaturalist



Common Blue Damselfly, Common Bluet
or Northern Bluet
Enallagma cyathigerum
Image: Wikipedia

At first glance dragonflies and damselflies appear to be quite similar. Both are long and narrow insects that are beautifully coloured in iridescent greens, blues, yellows and reds. They have large rounded heads covered mostly by two large compound eyes that allow them to have almost 360 degree vision. In addition they also have three simple eyes called [ocelli](#) (light detecting organs), that consist of a single lens and several sensory cells. Unlike compound eyes, ocelli do not form a complex image of the environment but are used to detect movement. Both dragonflies and damselflies have six legs located near their head that are used more for perching, egg laying and hunting than for walking, and two pairs of wings comprised of small criss-crossing veins that add strength and durability. The mouthparts are on the underside of the head and include simple chewing mandibles in the adult.

There are some physical differences between the two suborders. Adult damselflies are smaller and more slender than dragonflies. They have more separated eyes and their two pairs of wings are of equal size causing them to be weaker flyers. While at rest they fold their wings together up over their long delicate abdomen, much like a resting butterfly. In contrast adult dragonflies are larger and their hind wings are wider than their front wings, allowing them to be stronger fliers. In fact they can fly straight up or down, go backwards, fly upside down and hover, and when at rest they hold their wings out flat.



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Dragonflies and damselflies are most often found near water as they spend their larval stage on the bottom of ponds, streams, lakes, creeks and rivers. All Odonata have aquatic larvae called [naiads](#), and both naiads and adults are carnivorous. The naiads breathe through gills and eat tadpoles, snails, mosquito larvae and other aquatic insects. The larval stage lasts anywhere from eleven months to up to 5 years as they can go through anywhere from 9-14 molts, depending on the species. The adult stage lasts on average, a mere five weeks. Emergent and shoreline plants provide areas where dragonflies and damselflies can rest and take cover from predators. Even with their acute vision and agile flight both dragonflies and damselflies fall prey to birds, fish, spiders, frogs, lizards and even other dragonflies.



Above is a Green Darner Naiad (larva), found in ponds, lakes and wetlands in Ontario.

Image: David Bree



Some adult Green Darners migrate south in the fall. Flocks of them can be seen rising from the grasses along the shores of the Great Lakes in late August. Image: www.ontarioparks.com



Some **dragonflies** prefer ponds, others prefer lakes. Some **dragonflies** require slow-moving streams, others prefer fast-moving streams. Yet others prefer marshes, all depending on the species.

Image: www.earthrangers.com

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Dragonfly love making has been described as a rough and tumble affair! To mate, the male first grabs a female by the back of her neck using claspers at the end of his abdomen — these structures actually fit into species-specific grooves in the female. From here, the pair can fly around together in tandem. If the female is sexually receptive, she will lift her abdomen up to bring her "vagina" in contact with his "penis," allowing the male to transfer his sperm. In some species, the pair will remain in this wheel position for only a minute. Others, however, may stay in formation for several hours, while the male tries to use spoon-like structures on his penis to scoop out any sperm from other males the female may already have in her. After copulation, the male may immediately release his mate and flies away, or he may follow her around to guard her from other males while she lays her eggs in water. In some species, the pair will stay in tandem during the whole egg-laying process.



How dragonflies and damselflies do it!
Above: the heart-shaped "wheel" formation of mating pairs.
Image: livescience.com

If you are visiting one of Ontario's Provincial Parks and can't identify a dragonfly, snap a photo and tweet it to ONParks tagged #AskOPNaturalist and one of their naturalists will tell you what you saw.

How to attract dragonflies and damselflies to your garden

Sensitive to pollution these insects are indicators of healthy ecosystems. The best way to attract them to your yard is by adding a pond. The most attractive pond features for dragonflies and damselflies are:

- ponds that are out of the wind and have afternoon sun
- ponds that have emergent vegetation (plants with stiff stems) providing places for egg laying, habitat for naiads to make their final transformation into adults, places to hunt for food and hide from predators
- ponds with native plants with whom insects have co-evolved
- ponds with rocks around the perimeter, giving adults a place to warm themselves in the sun
- ponds with tall plants that provide perching sites for adult dragonflies and damselflies.

Want to Learn More about these insects in Ontario?

- [Dragonflies and Damselflies of the East](#) by Dennis Paulson
- [A Field Guide to Dragonflies and Damselflies of Algonquin Provincial Park and the Surrounding Area](#): by Colin D. Jones, Andrea Kingley, Peter Burke and Matt Holder



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Question of the Month - "How do I get rid of Creeping Charlie?"

Help! I have neighbours on both sides who don't weed. Their creeping Charlie is invading my grass. What is the best way to get rid of their weeds, or at least keep it from choking out my grass? I've already maximized the size of my perennial beds, but I need to keep a bit of grass in my front yard in order to get the mower to the grass in the shared area between the houses..



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Creeping Charlie (*Glechoma hederacea*) has many common names. This is a Eurasian perennial (introduced as a medicinal), and it can persist for years. Like other aggressive members of the mint family (*Lamiaceae*), it spreads via stems that grow at the soil surface (stolons) and can produce large colonies of ramets (clones of the parent plant). It also spreads via seeds. This plant grows best in moist, rich soils in part shade. It can thrive on compacted soils and disturbed sites. It can outcompete lawn grass species that struggle in shade. A combination of attitudinal, cultural, physical/mechanical and chemical approaches can be used to manage it.

Attitudinal: A diversity of plants in groundcovers (like lawns) are preferable to monocultures. They may better support pollinators, reduce herbivore pressures (e.g. white grubs), and the need for inputs of fertilizer, water, etc.

Cultural: If possible and desired, increase sun on the afflicted area by trimming shrubs and trees. If possible and desired, improve drainage (i.e., improve the soil by adding organic matter). If soil is compacted, consider aeration. If conditions can't be corrected, and the *Glechoma* has invaded your lawn, take a look at the grass species in the lawn. Are they right for the conditions? If not, over-seed or replace with more suitable species. Consider purchasing a blend that includes non-grass plant species (e.g. violets, yarrow, clover or micro-clover, etc.). Better still, reduce lawns all together and create a native plant garden. As a whole we should strive for lawn reduction to support a healthier environment. When caring for gardens and lawns, reduce watering. Allow lawns to go dormant in August. Mow less frequently and set mower to its highest mow height, usually around 7.5cm (3"). Fertilize only if a soil test indicates a need, in the fall. (Adding a nitrogen-fixing legume like clover to the lawn can reduce the need for fertilizing).

Physical/Mechanical: Hand removal of Creeping Charlie is tedious, but can be effective. If a new groundcover or garden is to be established, areas can be smothered (with tarp, cardboard, or newspapers, etc.) or solarized (if in sun).

Chemical: Use only when absolutely necessary & follow instructions. Iron, present as FeHEDTA is recommended for treatment of *Glechoma* in lawns, giving grass a chance to out-compete. Over-seed with a shade-tolerant grass seed shortly after application. *Sclerotinia minor* is also effective, particularly if a jute-fabric is laid over the area to prevent soil water loss.



Cathy Kavassalis
Halton Master Gardener

For further reading:
[Ground Ivy Purdue University](#)
[Healthy Lawns Canada](#)



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"What's Growing On"

Halton Master Gardener Meetings continue to **be held virtually** until further notice. We are still accepting new members! Interested? Email us!

We are still answering your garden questions, so send us an email! It's what we do best! HaltonMasterGardeners@Gmail.com



October is a great time to add compost or manure to your garden! Just be careful how you go about it...

Streaming Videos Just for You!

Short Engaging Videos for YOU!

- [The Real Reason Leaves Change Color In the Fall](#) (2 min)
- [To combat climate change, these scientists are turning CO₂ into rock](#) (2016, 9 min)
- [Medical marijuana research comes out of the shadows](#) (2016, 9 min)
- [California's water-starved sequoias show signs of stress](#) (2015, 6 min)
- [Forest health in a changing world](#) (2.5 min)

BBC TV

- [Gardeners World episode 25 2020](#)
- [Gardeners World episode 26 2020](#)
- [Gardeners World episode 27 2020](#)
- [Gardeners World episode 28 2020](#)



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