

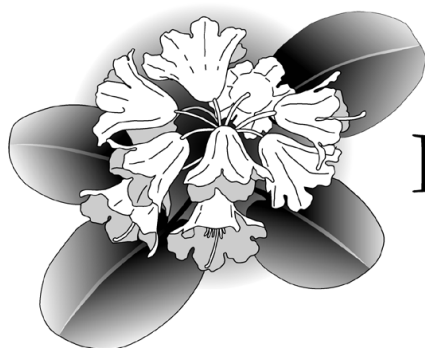
AtlanticRhodo

www.AtlanticRhodo.org

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September 2023





Atlantic Rhododendron & Horticultural Society

Our Mission

ARHS supports and promotes the development and exchange of expertise and material relating to the creation and maintenance of year-round garden landscapes featuring rhododendrons and other plants.

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Photos in articles are by the authors, unless otherwise identified.

Membership

Atlantic Rhododendron & Horticultural Society (ARHS). Membership renewals are now **due**. The current membership period is September 1, 2023 to August 31, 2024. The membership fee is \$30.00. For benefits and to download a membership form see ARHS website **www.atlanticrhodo.org**

American Rhododendron Society: ARHS is a chapter in District 12 of the American Rhododendron Society. Combined ARHS and ARS membership cost is \$84.00 Canadian.

An on-line payment system is now available on the society's website at: <https://atlanticrhodo.org/shop/>. You can also still pay by cheque, made out to "Atlantic Rhododendron & Horticultural Society" sent to **Jim Sharpe, 6231 Watt St, Halifax , Nova Scotia, B3H 2B9**. Payment can also be made by e-transfer to atlanticrhodo@gmail.com. Please include your name, address (with postal code), e-mail address and telephone number, for organizational purposes only

AtlanticRhodo is the Newsletter of the Atlantic Rhododendron & Horticultural Society. We welcome your comments, suggestions, articles, photos and other material for publication. Send all material to the editor.

Editor: Dennis Stuebing
dennis.stuebing@hotmail.com

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Cover Photo: Azalea 'Komo Kulshan'. [Photo John Weagle]



Calendar of Events

Meetings are normally held in the Nova Scotia Museum Auditorium. *Nova Scotia Museum of Natural History, 1747 Summer St. Halifax, Nova Scotia Canada*

Meeting notices will include a sign-up form for those who wish to attend in person. Space will be limited due to social distancing requirements as posted by Public Health at the time. The ARHS will continue to offer our programming by Zoom for those who cannot attend in person. Details and link will be sent to members.

Tuesday, 5 September 2023 at 7:30 pm

Diane Lucas, Botanical Artist and Illustrator Auditorium, Nova Scotia Museum of Natural History (1747 Summer Street, Halifax) and by Zoom
This presentation will discuss 18 butterflies common to Nova Scotia, their larval host plants, their adult diet, and how we can create their needed habitat in our gardens and parks. Each species of butterfly is illustrated with its caterpillars and their host plants.

Diane is a retired children's book illustrator, a botanical/nature artist, and a lifelong gardener. She is a local leader in David Suzuki's Butterflyway project and has created an illustration series entitled 'Butterflies and Their Host Plants', as an educational part of the project.

Tuesday, 3 October 2023 at 7:30 pm

Captain Dick Steele Lecture, Trials of Native Perennials at Mt. Cuba
Sam Hoadley, Mt. Cuba Center, Delaware
Auditorium, Nova Scotia Museum of Natural History (1747 Summer Street, Halifax) and by Zoom

The Mt. Cuba research team evaluates native plants and related cultivars for horticultural and ecological value, highlighting the ecosystem services that native plants provide. Sam Hoadley will present on the latest trails and the extensive information available through the Mt. Cuba Centre's website at <https://mtcubacenter.org/research/trial-garden/>

Sam Hoadley is the Manager of Horticultural Research at Mt. Cuba Center. He evaluates native plant species, old and new cultivars, and hybrids in the centre's Trial Garden. Prior to working at Mt. Cuba, he was the lead horticulturist for Longwood Gardens' Hillside Garden. He earned his degree in Sustainable Landscape Horticulture from the University of Vermont.

Tuesday, 7 November 2023 at 7:30 pm

Some New Plants and Fresh Ideas, Bob Howard, former ARHS Director of Programs and Landscape Gardener
Auditorium, Nova Scotia Museum of Natural History (1747 Summer Street, Halifax) and by Zoom

This talk will highlight three ideas for fresh plantings: blue flowers and foliage, some plants for late summer and fall, and the importance of patience in giving plants time to develop their character.

Long-time member Bob Howard, a retired landscape designer-contractor, gardens near Annapolis Royal, Nova Scotia.

Tuesday, 5 December 2023 at 7:30 pm

Annual Members Photos, Gardens, and Garden Tours. Auditorium, Nova Scotia Museum of Natural History (1747 Summer Street, Halifax) and by Zoom

Choose the **six** best photos from this year's blossoms, your garden, or gardens you have visited. We must limit the number of photos from each person to allow for all to contribute. The meeting will be followed by our winter social. Please bring snacks to share. Juice and soft drinks will be provided.

Thank you for avoiding the use of perfumes and scented products when you come to ARHS events.

A Word From The Editor

Dennis L. Stuebing, PhD

As some of you may be aware, this issue is late. I appreciate everyone's patience and despite the delay, we've got a great compilation of articles for you to peruse. Jim Sharpe has provided an overview of this year's program as well as his Presidential Report. Lynn Brooks' membership update is an important reminder to renew as soon as possible including, if you so desire, using the new online tool available on the ARHS website. We are again indebted to Bob Howard for submitting an article, this time on climate testing in the garden. Also included is a 2016 reprint of an article by Todd Boland on rock garden rhododendrons. Finally, Diane' Lucas' September presentation slides have been included, on gardening for butterflies.

This summer has been an incredibly busy time, both personally and professionally. The most pertinent aspect of that has been our move to a new home. I won't bore you with the details but suffice it to say, it all happened very quickly. My partner and I (and our dog) are happy to be in our new digs and I'm excited to start gardening at our new place. Thankfully, we were able to exclude a bunch of plants in the sale of our former residence, to ensure we've got some favorites to populate the new beds and borders. Things have started to take shape, but I hope for a long mild autumn to ensure everything has time to settle in before winter.

This will be my final issue as Editor. It has been a great pleasure to volunteer in this role. Thanks very much to Sterling Levy for collaborating over the past two years and all the support pulling these issues together. Thanks too to the Board for their great suggestions and assistance. Finally, thanks to all of you for your interest in the newsletter and for all the contributors for your articles, photos, and other input. Happy gardening! ☺

Notes from the Membership Chair

Lynn Brooks

Once again it is time to renew your membership in the ARHS for 2023-24. Many have already done so using our new Stripe credit card system, which is very secure and gives an almost instant acknowledgement of payment for your records. It has certainly made life easier for your still new Membership Chair!

Our members are not only in Atlantic Canada, but all parts of Canada, and abroad. To me it speaks to how a love of plants is universal. Some of the members so far this year are returning members who had let their membership lapse so: welcome back! But it is always nice to welcome new people as well!

New this year are: **Andrea Lantz Powers** of Halifax and **Yvonne Chute** of Timberlea. Welcome! And I do hope to see you at the meetings.

One of the perks of belonging to the ARHS is that you also can belong to the American Rhododendron Society (ARS), receive their newsletter 4 times a year and attend conferences that are held all over North America. To be an ARS member **you must pay before December 31st** of the current year.

Last year we had 120 active members and as of the end of September, 60 people had renewed for 2023-24. Like the ARS, we wish to have our members **pay by 31 December**. That makes it much easier for accounting purposes. **Any membership fees received in 2024, will only become active in the fall of 2024.**

So go on the website and click: "Join Today!" Select 'Membership Payment' and it will take you to the registration page with the headline 'SHOP'. Don't let that throw you, Stripe is a system used by many small businesses, and is set up with that in mind. But if you have any problems, let us know. You can still pay at meetings, by e-transfer, or mail in your membership. But using the website ensures that we have all your information up to date especially your e-mail, so you are not missing out on notices or the newsletter.

There is also a place to indicate if you are interested in serving on the board. All volunteer organizations need people willing to take positions and sometimes it is just to be on a committee. I hope you will consider this because in today's ZOOM world, all you need is a computer and the interest to help out. ☺

President's Report

Jim Sharpe

Thank you for your interest and support of the Atlantic Rhododendron and Horticultural Society (ARHS). Membership offers you admission to our lectures on the first Tuesday of every month from September to May at the Nova Scotia (NS) Natural History Museum and via Zoom, as well as access to plant materials through our seed exchange and plant sales, and garden tours to a variety of interesting gardens featuring rhododendrons.

This summer we had a very successful Book Sale and Garden Party on Sunday, August 27 at the home of Frances Howard in downtown Dartmouth. It was a rather wet afternoon but all the rain we have received this August will promote bud formation on the rhododendrons for next year's flowers. We needed to disperse our library books as we can no longer store them at the NS Museum of Natural History. Over \$700 was raised in support of the ARHS. We will be exploring a database in which we can share gardening books with others in the society who are interested.

Along with other members of the ARHS, I was involved in the North American Rock Garden Society (NARGS) Annual General Meeting and Conference held at the Dalhousie Agricultural Campus (Dal AC) from 8 – 11 June 2023. Over one hundred gardeners from the United States and Canada enjoyed the speakers, garden tours, and social activities. I've never received so many compliments on our Nova Scotia gardens and flora. The conference also featured an impressive plant sale featuring Wrightman Alpine Nursery and local alpine propagators.

The NS Rock Garden Club will be bringing in three speakers in September, October, and November. We will be able to promote these talks to members of the ARHS. The first speaker is Paul Spriggs from Victoria, author of "Crevice Gardening," who will speak at the MacRae Library, at the Dal AC on Saturday, 16 September at 12 noon. The plan is also to broadcast the presentation via Zoom. Watch for announcements for all of the sessions by ARHS e-mail.

This summer we have improved our website, atlanticrhodo.org, so that we can now accept payment for membership renewals. It is also possible to join the American Rhododendron Society (ARS) and make extra payment for printed copies of Atlantic Rhodo, our quarterly newsletter. Please renew your membership now to ensure that you can participate in this year's activities.

We also need more volunteers including for the Board of Directors. Dennis Stuebing has edited the AtlanticRhodo since 2021 but has advised that he can no longer continue. Dennis Crouse has been coordinating the Members' Pre-ordered Plant Sale and has advised that he wants to pass of the responsibility to another member. We also need a volunteer for the position of Treasurer. Please contact me at sharpe@ns.sympatico.ca or by phone at 902-440-0562 if you are interested in helping with the important work of ARHS.

After our very successful May 2023 Garden Tour of the Annapolis Royal Historic Gardens and other gardens in the Annapolis Royal area, we are planning an even more ambitious tour for the spring of 2024. Freeman Patterson has over 2000 rhodos and azaleas at his garden in Shamper's Bluff, Kingston Peninsula, close to Saint John, New Brunswick. He has invited ARHS members to visit his garden during the June peak bloom period. Details will be provided in future newsletters.

We have been asked by the ARS to host its annual convention in 2025. This builds on our experience hosting the 2021 Convention, which was held via Zoom because of COVID-19 restrictions. We have proposed to hold the Convention 5 – 8 June 2025 in Wofville, NS. We are currently evaluating locations, either on the Acadia University campus or the Old Orchard Inn. We will provide an update when the location is selected. The interest from ARS members to visit NS, shows what important rhodos and gardens we have to share.

I look forward to seeing you all, either in person at the Tuesday evening sessions at the museum, or by Zoom.

Climate Testing

Bob Howard



Photo 1. *Anemone nemerosa* .



Figure 2. *Anemone leveillei*.

As usual, this past winter was unusual. The long mild fall stretched into December, and it continued warm into January. Hydrangea flower buds were swelling with dreams of early summer fun. Then, at the end of January winter turn fiercely cold. The night of Feb 3 was the coldest at -26C and remained below -20C for eight hours. The result has been a lot fewer flowers on common plants like forsythia and blueberries. For the mophead hydrangeas, only *Hydrangea macrophylla* 'Endless Summer' and *H. m.* 'Vibraye' produced any flowers at all.

As for rhododendrons in my garden, most, including Mist Maiden, Scintillation, Grand Pré, Baby Dane, and others, bloomed well. But the yellow-flowered rhodies had a hard year. *R.* 'Nancy Steele', *R.* 'Gold Prinz', and *R.* 'Hong Kong' gave no flowers. Flowering generously, *R.* 'Capistrano' was surprisingly the exception among the yellow rhododendrons.

Herbaceous perennials have the advantage of being underground in the winter. Several kinds of anemones are favourites in my garden. In early spring, *Anemone nemerosa* (see, photo 1), the wood anemone, blooms with numerous pale violet, almost blue, white petals of slightly cupped flowers, making a carpet at the feet of a *Rhododendron pachysanthum* and covering the ground where willow gentians push through later in the year. Hardy to zone five, fragile, tiny tubers spread moderately and are easy to divide. Grow them in humus-rich woodland soil and keep slightly moist. They go dormant in summer, so be careful about digging once they disappear for the year.

In early summer, I have *Anemone leveillei* (see, photo 2) growing next to stone steps in the shade of a yew hedge. Like many anemones, the common name is windflower. Also hardy to zone 5, this windflower presents itself like an exuberant wilding, unaware of its beauty. The blue-violet stamens set off the yellow centres with pure white petals. From China, the plant likes woody soil, moderate moisture, and light shade.

In the fall, immune to the winter assault, Japanese anemones are flowering spectacularly for me this year. They root deeply, and are hardy to zone 4. Introduced in 1858 from France, *Anemone x hybrida* 'Honorine Jobert' was chosen the Perennial Plant Association's Perennial of the Year in 2016. *A. h.* 'September Charm' is another old-timer with elegant beauty (see, photos 3, 4, 5). Growing 4'-5' tall, both of these hardy, fall-blooming Japanese anemones like full sun to part shade, slightly moist soil, humus-y soil, and make great, long-lasting cut flowers.



Photo 3. *Anemone x hybrida* 'Honorine Jobert'.



Photo 4. *Anemone x hybrida* 'September Charm'.



Photo 5. *Anemone x hybrida* 'September Charm'.



Photo 6. *H. paniculata* 'Le Vasterival'.

Mophead hydrangeas are infamous for being inconstant flowerers. I am testing many other species of hydrangeas, especially for hardiness to spring frost as well as the variable winter temperatures we've experienced lately. The panicle (*H. paniculata*) and smooth (*H. arborescens*) hydrangeas are not bothered by our cold dips. For example, *H. paniculata* 'Le Vasterival' (also called 'Great Star') is a dependable beauty. Individual inflorescences are dramatic in large flower arrangements (see, photos 6 and 7).



Photo 7. *H. paniculata* 'Le Vasterival'.



Photo 8. *H. involucrata*.

An odd ball I have is *H. involucrata* 'Hortensis', called the bracted hydrangea. This is a zone 6 (with protection?) plant that flowers on new growth. So even if the stems and flower buds are killed by frost, the plant produces new stems and gives flowers in late summer. It starts blooming in mid-August and flowers through September, a time of year when flowering shrubs are scarce. I "hide" this plant among camassia at the foot of a Maries viburnum, so that one does not see the new growth until the camassia foliage dies down in July (see, photos 8, 9, 10).



Photo 9. *H. H. involucrata*.



Photo 10. *H. involucrata* 'Hortensis'.



Photo 11. *Hydrangea yezoensis*.

My best success so far with seed-raised hydrangeas is *Hydrangea yezoensis*, by some call it *H. serrata* ssp *yezoensis*. This species originates in Hokkaido, the northern-most island of Japan. It's a mountain hydrangea, hardier than the large-leaved hydrangeas, and much more resistant to spring frosts as well as the winter cold. As mountain plants, they are not easily seduced into soft growth by inopportune balmy weather. The adjacent photo shows a leafy stem. At the bottom of the photo, you can see year-old wood. Growing directly from the tip of that old wood you can see new growth, a stem extension from this year. In short, there is no frost die-back. Even in this past winter of unseasonable warmth followed by sudden cold, the old stem did not frost kill.

This plant flowers for a long time. It starts with blue flowers from late June through July and then turns a matte pink in August-Sept (see, photos 12, 13). It is now five years old and about 30 inches tall. I expect it to top-out at 3' – 4' high. This is even more flower-bud hardy than Blue Billow, my best recommendation for a commercially available mountain hydrangea.

I have several other flower-bud hardy hydrangeas I am testing with promising results so far. This past winter was a severe test that demonstrated there are many mountain hydrangeas that are reliable flowerers in zone 6. ☞



Photo 12. *Hydrangea yezoensis*.



Photo 13. *Hydrangea yezoensis*.



Saxifraga burseriana

Rock Garden Rhododendrons

Todd Boland, St. John's, Newfoundland



‘Lavendula’

The genus *Rhododendron* is among the largest group of flowering plants. With so many species and innumerable hybrids, it is not surprising that some would be suitable for the rock garden. Of course, that depends on the size of the rockery. If you have a small crevice garden, only those which remain under 30 cm would probably work. Some rhododendrons in the rockery at the Memorial University of Newfoundland Botanical Garden (zone 5b) are nearly 2 m tall, yet they still look in scale.

The following species and hybrids, all growing at the MUN Botanical Garden, are those which would take some 20 years or more to reach more than 90 cm, so they should be suitable for most modest-sized rock gardens - at least for use along the front of an ericaceous border.

Due to the small size of their leaves and flowers, most of the “rock garden” rhododendrons are members of the lepidote group. Newfoundland is home to a native lepidote called *R. lapponicum*, the Lapland rosebay. While rarely taller than 30 cm, it is not an easy species to cultivate. Even we have trouble keeping it happy in our botanical garden.

Perhaps the easiest and most available species is the so-called *R. impeditum*, probably misnamed and in reality, *R. fastigiatum*. This mound-forming species has small blue-tinted foliage and masses of small deep purple flowers. Rarely will it exceed 60 cm. The *R. fastigiatum* hybrids, ‘Purple Gem’ and ‘Ramapo’, are also readily available. With the parental influence of *R. minus*, these form larger mounds with larger leaves. Still, they rarely exceed 90 cm in height, but may be twice as wide.

Other ‘purple’ dwarf species include, *R. cuneatum* (could exceed 90 cm, but after 10 years from seed, ours is still only 45 cm), *R. russatum* (good forms are bushy and remain under 60 cm), *R. litangense* (ours is possibly the real *R. impeditum* at 30 cm) and *R. intricatum* (a distinct lavender-blue and under 30 cm locally after 20 years).

The most unique species, *R. campylogynum*, is among the smallest. This one has thimble-shaped flowers that are unusual in being maroon-purple. The variety ‘Myrtilloides’ rarely exceeds 20 cm and is suitable for an alpine trough.

From the European Alps come, *R. ferrugineum* and *R. hirsutum*. Both may exceed 90 cm, but are generally quite slow. After 30 years, ours are approaching the 90 cm mark. Both have pink flowers and are among the latest blooming of the dwarfs.

Rhododendron mucronulatum is a tall deciduous species but has two dwarf selections called, ‘Dwarf Cheju’ and ‘Crater’s Edge’, both of which are popular as bonsai. Flowers are purple-pink with brilliant orange-red fall foliage.

If you are a lover of yellow rhododendrons, try *R. keiskei* which generally has a low habit. The species is rather rangy, but the selection ‘Yaku Fairy’ is very compact.

Perhaps the largest flowered of the dwarf lepidotes is *R. calostrotum* ssp. *calostrotum* and *R. calostrotum* ssp. *keleticum*. Both are prostrate and rarely exceed 15 cm. Their purplish-crimson flowers are somewhat reminiscent of a pansy.

Also with larger flowers is *R. saluenense*. This species with magenta flowers and distinct bristly stems may reach 90 cm.

Our native Labrador tea, *R. groenlandicum*, is far easier to cultivate than our native *R. lapponicum*. It has a bushy habit, usually less than 60 cm, with rounded clusters of white flowers and fragrant, indumented foliage.



R. calostrotum var. *keleticum*.

Vaguely similar but without indumentum, is *R. sargentianum* with clusters of creamy-white flowers. Some people describe its foliage as smelling like raspberries.

We also grow a number of lepidote hybrids that are still under 90 cm after 20 years. These include

- ‘Curlew’ : yellow, 45 cm high
- ‘Wren’ : yellow, 15 cm
- ‘Patty Bee’ : yellow, purple-red winter foliage, 45 cm
- ‘Tow Head’ : cream, 30 cm
- ‘Ptarmigan’ : white, 30 cm
- ‘Egret’ : white, 45 cm
- ‘Tottenham’ : pink, 60 cm
- ‘Lavendula’ : dark lavender, 90 cm
- ‘Wilsonii’ : pink, 90 cm but very broad
- ‘Ginny Gee’ : two-tone pink and white, 60 cm.

The only dwarf elepidote species we grow is *R. williamsianum* with its oversized solitary pink flowers and small round leaves that unfurl red-tinted. Our 25-year-old plant is about 75 cm tall but easily three times as wide.

R. pachysanthum is grown for its wonderful tomentose and indumented foliage as well as its pale pink flowers. While this elepidote can eventually exceed the 90 cm mark, it will be slow to do so.

R. ‘Carmen’ always catches visitors’ eyes with its relatively large blood-red bell-shaped flowers. Our plant is over 100 cm wide, but under 30 cm tall. A hybrid between *R. sanguineum* ssp. *didymium* and *R. forrestii* ssp. *forrestii*, presumably we could grow both dwarf parents. Similar in appearance and colour, but larger in size are ‘Scarlet Wonder’, ‘Sumatra’, ‘Baden Baden’ and ‘Elviira’.

These are some of the dwarf rhododendrons that may be suitable for coastal Nova Scotia. There may be others but these are the ones I am familiar with from my experiences at our botanical garden. I am always looking for more small-sized rhododendrons, so with luck, this list will significantly increase in the years to come.

Editor’s Note:

This article, by Todd Boland, was originally published in AtlanticRhodo Issue 40, Vol. 3 (Fall 2016) and may have been based on a presentation around that time. We are republishing it now given its timeless value for our readers. ☞



‘Wren’

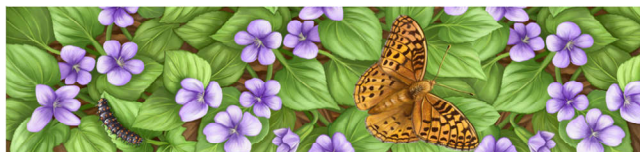


‘Scarlet Wonder’

Gardening For Butterflies

Diane Lucas made a presentation to the ARHS on 5 September 2023 entitled "Gardening for Butterflies: Butterflies, caterpillars and host plants". The following slides were used in Diane's presentation and have been included with permission. Thanks to Jim Sharpe for coordinating Diane's presentation as part of the 2023-24 Program and ensuring the slides were submitted for this issue.

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GARDENING FOR BUTTERFLIES

Butterflies, Caterpillars & Host Plants

A presentation by Diane Lucas

- Butterfly populations suffer from habitat loss, pesticide use and climate change
- Butterfly habitats promote biodiversity of plant and animal life
- Support the lifecycle of pollinators and other insects



Butterflies Are:

- **Pollinators**
- **Nutrition for wildlife** - birds, reptiles, amphibians, insects & small mammals.
- *(96% of songbirds feed insects, especially soft-bodied insects, to their young)*



Why Plant Native?

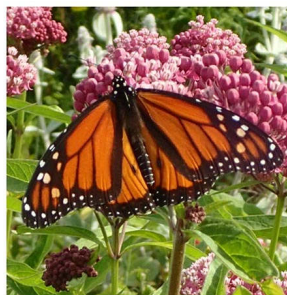
- Evolved here for 1000s of years
- Evolved in concert with our native animals



Larval Host Plants

'A host plant is a plant upon which an organism lodges and subsists'

***All Lepidoptera have host plants**



Start With A Monarch Garden



You will need:

- To not use pesticides or herbicides
- A sunny area with medium moisture
- At least 6 host plants (Swamp Milkweed)
- Native nectar plants
- Shelter plants
- A puddle



**Host plant:
Milkweed**

- Over 100 species of milkweed in NA
- Swamp Milkweed (*Asclepias incarnata*) native to NS

A Succession of Native Nectar Flowers



**Black-eyed Susan
*Rudbeckia hirta***

- A biennial that blooms from June – October
- High value to pollinators



**Swamp Milkweed
*Asclepias incarnata***

- Blooms June, July, August
- Monarch larval host plant
- High value to pollinators



**Purple Coneflower
*Echinacea purpurea***

- Blooms July, August, September
- Attracts butterflies and bees



**Spotted Joe-pye Weed
*Eutrochium maculatum***

- Provides nectar to butterflies, bees and moths
- A larval host plant to several species of moths



**Cutleaf Coneflower
*Rudbeckia laciniata***

- Attracts pollinators - butterflies, moths, bees, wasps, flies and some beetles
- Winter seedheads are food for Goldfinch birds.



Heart-leaved Aster *Symphotrichum cordifolium*

- Bloom time – September, October
- 18 native asters in Nova Scotia
- Fall nectar and pollen plant



Canada Goldenrod *Solidago canadensis*

- Fall nectar & pollen
- Winter seed source for birds and small mammals
- 20 different species of Goldenrod in NS
- Not a cause of seasonal allergies – pollen is sticky & heavy

Shelter Plants For Butterflies and Pupae



Native Grasses

- Little Bluestem
- Switch Grass



Shrubs

- Redstick Dogwood

Sourcing Seeds and Plants

Native Plant Seeds: Prairie Moon Nursery, Wildflower Farm



Plants:

- Hillendale Perennials – Brookfield
- Baldwin Nurseries – Falmouth
- The Briar Patch – Berwick
- Harriett Irving Botanical Gardens Native Plant Sale (once a year), Wolfville
- LaHave Drumlins Native Plant Nursery – New Germany



A Mud Puddle

A bird bath – to a ‘butterfly puddler’

To make add:

- ordinary garden dirt / some sand / a bit of compost / flat stones / some water



Beyond Monarchs

Host Plants For Other Butterflies



SWALLOWTAILS

Canadian Tiger Swallowtail On a Wild Cherry Tree

Host plant(s): Willow, Cherry, Poplar, Ash, Birch and Apple trees

2.6 – 3.12



Canadian Tiger Swallowtail On a Paper Birch

Nectar plants: Milkweeds, Purple coneflower, Black-eyed Susan's, Joe-Pye weed, Beebalm +
Males are mud-puddlers.

Eggs: singly on host plant
Caterpillars: defence - fake eye spots and osmeterium
Overwinters: chrysalis.



Black Swallowtail on Golden Alexander

Host plant(s): carrot, celery or parsley family - Golden Alexander, Sweet Cicely, Queen Anne's Lace +

Host herbs and vegetables: Dill, Fennel, Lovage, Parsnip, and Parsley

Upper – female
Lower – male

2.75 – 3.5"



Black Swallowtail Caterpillar on Golden Alexander

Nectar plants: Joe Pye, Milkweed, Coneflower, Thistles, Clovers, Phlox + Mud-puddling

Generations per year: 2
Eggs: singly on upper leaf
Caterpillar: Young - spines, bird droppings
Overwinters: chrysalis



SULPHURS

Pink Edged Sulphur On a Lowbush Blueberry

Host Plant(s): Blueberries

Nectar Plants: flowers near blueberries - mud-puddling

Generations per year: 1
Eggs: singly on upper leaves
Caterpillar: eats little in 1st & 2nd instar
Overwinters: 3rd instar cat
1.5 – 2.6"



Orange Sulphurs on Tick Trefoil

Host plant(s): pea & legume family - Tick Trefoil, Clover, Alfalfa, Vetches, Wild Indigo, Self-heal, Wild lupine +

male – left female – right

1.4-2.4"



Orange Sulphurs on Tick Trefoil

Nectar plants: Milkweed, Black Eyed Susans, Purple Coneflower, Fleabanes, Asters, +

Generations per year: 2 to 3

Eggs: singly on upper leaf

Caterpillars: usually eat at night, from stem to tip

Overwinters: as a chrysalis



Clouded Sulphurs On Self-Heal

Host plant(s): pea and legume family

Nectar plants: Fleabanes, Black- Eyed Susan's, Milkweed, Asters, Goldenrods, + mud-puddlers

Generations per year: 3-4

Eggs: singly on upper leaf

Caterpillars: change colour

Overwinters: chrysalis

1.5 – 2.75"



GOSSAMERS Eastern Pine Elfin On A Jack Pine

Host plant(s): Pines - Scrub pines, Jack pines, White pines

Nectar plants: Wild Strawberry, Blueberry, Cinquefoil, Milkweeds

Generations per year: 1

Eggs: singly on pine needles & buds

Caterpillars: eat seedpods & buds

Overwinters: chrysalis in leaf litter

1 – 1.25"



Northern Azure On Pagoda Dogwood

Host plants: Dogwoods, Cherries, Blueberries, Meadowsweet, Viburnums, New Jersey Tea +

Generations per year: 2

Female - left male - right

.87 – 1"



Northern Azure On Pagoda Dogwood

Nectar plants: Blackberry, New Jersey Tea, Milkweed +

mud puddlers

Eggs: singly on flower buds

Caterpillars: eats buds - exudes honeydew, eaten by ant protectors

Overwinters: chrysalis in the soil or crevices



Bog Copper On Bog Cranberry

Host plant(s): Large &
Small Cranberry

Nectar plants: Cranberry
blossoms, dew drops

Generations per year: 1

Eggs: singly leaf underside.

Can survive underwater

Caterpillars: secretes
honeydew - ants are
protectors

Overwinters: fully developed
egg .87 - .98"



BRUSHFOOTS

Harris' Checkerspot On Flat-topped White Aster

Host plant(s): Flat-topped
White Aster

Nectar plants: Flat-topped
White Aster, Arrowwood
Viburnum, Spreading
Dogbane, Gray-stemmed
Dogwood

Generations per year: 1

1.25 - 1.75"



Harris' Checkerspot On Flat-topped White Aster

Eggs: clusters under the
middle stem leaves

Caterpillars: lay on web,
live & feed communally

Overwinters: caterpillar
in leaf litter, beneath
host plants



Viceroy On Balsam Poplar

Host plant(s): Willows,
Poplars, Cottonwoods,
Aspens, Cherry

Diet/Nectar plants: dung,
carrion, fungi, Goldenrods,
Thistles, Asters, Milkweed,
Joe Pye, Black-eyed Susans

Generations per year: 2 - 3

Eggs: singly on upper tips of
leaves

Caterpillars: camouflage,
horns - eats mainly at night.

Overwinters: caterpillar in a
hibernaculum

2.5 - 3"



White Admiral On Prairie Willow

Host plant(s): Cherries,
Aspen, Cottonwoods, Oaks,
Hawthorns, Birches, Willows,
Basswoods, Serviceberries +

Diet/Nectar plants: tree sap,
carrion liquid, dung, decaying
flowers, aphid honeydew,
rarely nectar - avid puddlers

Generations per year: 2

2 - 3"



White Admiral On American Pussy Willow

Eggs: singly - upper leaf
tips

Caterpillars: bird
droppings, horns - eat
mostly at night.

Overwinters: caterpillar in
5th instar - hibernaculum,
tying leaves together.



Red Admiral On Wood Nettle

Host plant(s): nettle family:
Tall Wild Nettle, Wood
Nettle, Smallspike False
Nettle, European Stinging
Nettle

Diet/Nectar plants: sap,
fermented fruit & bird
dropping liquid, sometimes
nectar from Milkweeds, Joe
Pye, Goldenrods

Generations per year: 2

1.75 – 2.25"



Red Admiral On Wood Nettle

Eggs: singly, upper leaf side

Caterpillars: varies in colour
- brown, grey black,
yellowish green, bristly
spines, makes a leaf shelter,
eats from shelter, makes
chrysalis in host plant

Overwinters: an adult –
northern populations make
a small migration south



Mourning Cloak On American Elm

Host plant(s): Willows,
Poplars Birches, Hackberry,
Maples, Wild Roses, Spirea

Diet/Nectar plants: sap -
Maples, Oaks, Poplars &
Birch, aphid honeydew, fruit
ferment, rarely nectar - mud
puddlers

Generations per year: 1 – 2

Eggs: clusters

Caterpillars: live & eat
together - defence: spines,
shake in unison

Overwinters: chrysalis

2 – 3"



Northern Crescents On Heartleaf Aster

Host plant(s): Asters

Nectar plants: Fleabane,
Goldenrod, White Clover

Generations per year: 1 – 2

Eggs: clusters of
approximately 40

Caterpillars: 1st & 2nd instar
live communally, feed at
night, rest beneath host
plant

Overwinters: as a 3rd instar
caterpillar

Female – left male – right 1.25 – 2"



Great Spangled Fritillary On Violets

Host plant(s): Various Violet
species

Nectar plants: Milkweeds,
Joe Pye, Ironweeds, Purple
Coneflower, Violets and
more.

Generations per year: 1

2.4 – 3.5"



American Lady On Pearly Everlasting

Host plant(s): Sweet &
Pearly Everlasting,
Pussytoes, Ironweed +

Diet/Nectar plants:
Shadbush, Chokeberry, Joe
Pye, Milkweed, Ironweeds,
Selfheal, Goldenrod + sap,
old fruit, mud puddles

Generations per year: 3 – 4

Eggs: singly on upper leaf

Caterpillars: solitary nest,
feeds at night or cloudy days

Overwinters: as an adult

1.75 – 2.6"



Great Spangled Fritillary On Violets

Eggs: singly at base of host plant

Caterpillars: eat at night, hide in leaf litter away from host plant in the daytime

Overwinters: as 1st instar caterpillar, shelters in leaf litter

2.4 – 3.5"



SKIPPERS

Tawny Edged Skipper On Switch Grass

Host plant(s): Panic grasses, Bluegrasses, Sedges

Diet/Nectar plants: Milkweed, Joe Pye, Daisies, Ironweeds, Coneflower, Aster, Goldenrod + - puddles,

Generations per year: 1 north, 2 – 3 south

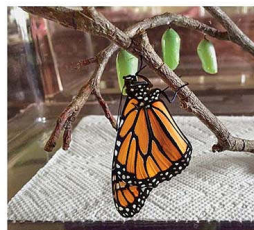
Eggs: singly on flowering plants next to host

Caterpillars: variable colour, builds nests of grass

Overwinters: chrysalis in grass nest 75 – 1"

THE DON'TS

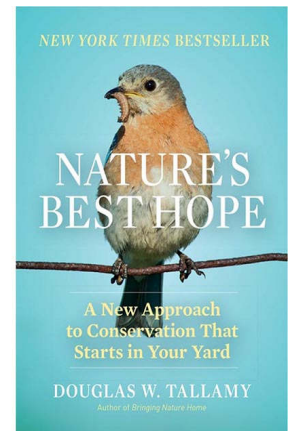
- Please **do not** hand raise butterflies – do not buy kits or bring caterpillars indoors.



PLEASE DO

*Please **DO** create a native, garden ecosystem for butterflies and wildlife.

*Please **DO** read 'Nature's Best Hope'.



'In helping butterflies to flourish, we help to protect all insects, as well as the animals and plants that depend on them.'

- David Suzuki -



www.lucasillustration.com

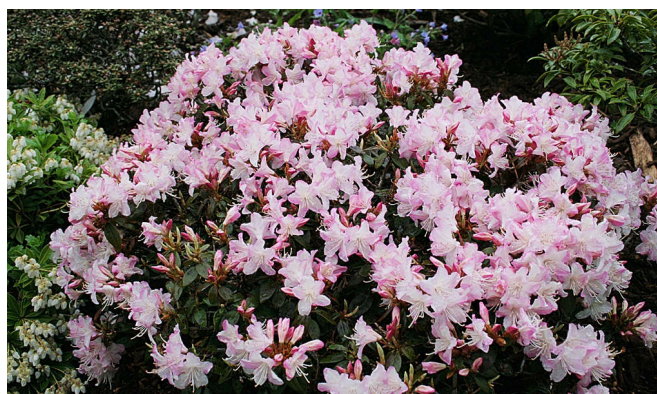


Lewisiopsis (Lewisia) tweedy.

Atlantic Rhododendron and Horticultural Society Board Members and Other Roles

ROLES & RESPONSIBILITIES	NAME	CONTACT INFORMATION
President, Program Director, and Acting Treasurer	Jim Sharpe	sharpe@ns.sympatico.ca
Vice-President, Website and Communications	Rebecca Lancaster	thelancasters62@gmail.com
Secretary	Nancy Lewis	nancy.lewis56@gmail.com
Plant Sale Coordinators	Dennis Crouse Jane Rostek	denniscrouse0@gmail.com sunandwater@ns.sympatico.ca
Editor, AtlanticRhodo	Dennis Stuebing	Dennis.stuebing@hotmail.com
Garden Tour Coordinator	Lynn Rotin	lynn.rotin@gmail.com
Director-at-Large	Carol Morrison	carolsfineart@ns.sympatico.ca
Seed Exchange Coordinator	Sharon Bryson	sbryson@ns.sympatico.ca
Membership Coordinator	Lynn Brooks	lynbrook@bellaliant.net
Garden Outreach	Chris Hopgood	cpher111@gmail.com
District 12 ARS Representative	Christina Woodward	canadacaw@yahoo.ca

Photo Album - A selection of photos for your enjoyment.



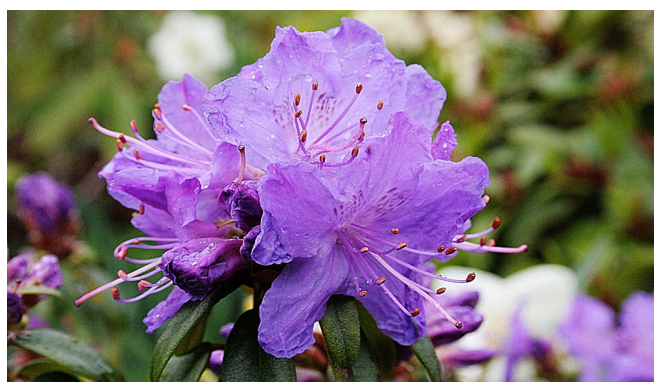
'Ginny Gee'. [Photo Bob Pettipas]



'Sarled'. [Photo Sterling Levy]



'Towhead'. [Photo Bob Pettipas]



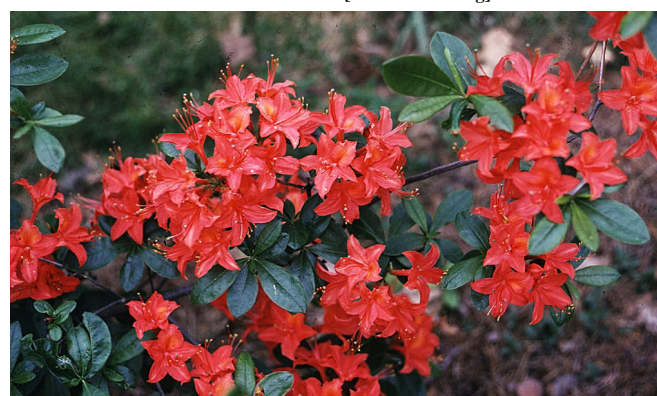
'Blue Ridge'. [Photo Bob Pettipas]



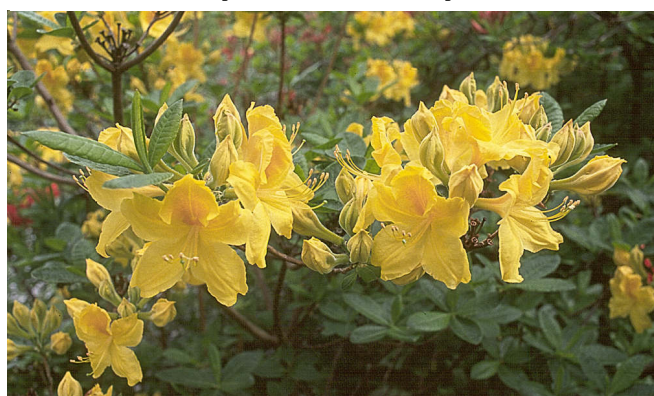
***R. canadense album*. [Photo Don Craig]**



'Capistrano'. [Photo Bob Pettipas]



'Satan'. [Photo Don Craig]



'Klondyke'. [Photo Don Craig]