

Founded in 1997.
Logo art of Tall Goldenrod,
Solidago altissima,
by Nat Cleavitt, 2006.



Solidago

Newsletter of the Finger Lakes Native Plant Society

Volume 18, No. 1



March 2017

WILD GARDENING / ECOLOGY

I Am In Love with Indian Hemp!

(*Apocynum cannabinum*)

by Meena Haribal



ONCE A FRIEND WAS VISITING MY HOUSE, and she was looking at my plants in the garden. She stooped down on defoliated Pussy Toes and said, “Hey girl, this plant needs to be taken care of,” and she made a movement as if to take something from the plant. Immediately I stopped her, and told her that I was growing plants for the other creatures, and I didn’t mind them being eaten! Those were caterpillars of the American Lady butterfly, gorging on the plant. I like my garden to be a living garden, and not a barren monoculture of lawn; even the desert has varied life.

We all do gardening for various purposes. I do gardening for the love of a live garden. For me, it is not just plants that make up my garden, but it includes anything associated with the plants, like leaf litter, mosses, lichens, insects, birds, and mammals. Also I love the fragrance associated with it!

A few years back, when I was not so knowledgeable, I planted some flowering plants with the hopes of attracting butterflies. I did not know that the flowering plants that are commonly sold in nurseries are barren plants that are specifically bred to be devoid of fragrance, nectar, and any value as a food source, and to resist insects. They are just showy plants with minimal impacts. So I started looking for native plants. In the wild, I had seen that Indian Hemp — *Apocynum cannabinum* — was a great plant that attracted lots of insects. I remember one day in the Durland Preserve, seeing that these plants were loaded with thousands of European Skippers and other species of butterflies. So I was interested in growing this plant in my garden. I also knew it spreads around if uncontrolled, but I was ready to take chances. I saw that Bill Evans had a large patch of this plant in his yard, so I told him that I was interested in getting some of it for my garden. A couple of years later, he came with a starter plant, and I planted it at the edge of the patch. Since then it has grown into a 2 × 1 m patch, and has been spreading, but I am keeping it trimmed. It is slowly shading my Pussy Toes patch, but I am hoping that the Pussy Toes are equally aggressive, and keep fighting with the *A. cannabinum*.

Apocynum cannabinum is a perennial plant with a reddish stem that grows in clumps to a height of 1½ m. It produces clusters of small, greenish-white flowers of about 2 × 4 mm in size, in groups at the end of each branch (Figs. 1-2). They flower profusely from early July to August, and have a very faint fragrance. I can’t decide at what time of day the fragrance is at its peak. These tiny flowers produce nectar and attract many species of insects. The plants are abuzz with insect noises. Bees, wasps, sawflies, yellow jackets, butterflies, moths, beetles, bugs, flies, and many other interacting *tritrophic species* like spiders, wasps, ants, assassin bugs, etc., visit this plant. It is a live plant with lots of dynamic interactions. For Native Americans, the plant had various uses — they made rope out of it, and also used it for medicinal purposes.



1 & 2: Indian Hemp (*Apocynum cannabinum*)

*During the last three years, I have been keeping track of the insects that visit this plant, by photographing or taking videos. The different groups of insects I have encountered on *A. cannabinum* are discussed and illustrated below.*

Wasps: There are several species of wasps that visit this plant, and I have to be careful to distinguish them from flies that mimic wasps. It is fun to sit and identify them with photos. I have tentatively identified them, and they have interesting common names that mean something. The Northern Paper Wasp makes a paper nest, while the Katydid Wasp's larvae feed on katydids provided by their mother. Then there are brilliantly metallic-colored cuckoo wasps, which lay eggs in the larva or eggs of other wasps or bees, hence the name. The Brown-legged Grass Carrier Wasp, with its brilliant metallic bluish-purple wings, flits from flower to flower (Fig. 12, on page 4). Then there is a beautiful black-and-white wasp called the Mason Wasp (Fig. 3), which is fairly common. These wasps have ecologically different functions, yet they all need energy to do whatever they have to do, and depend on the nectar sources, and in return many of them pollinate plants. And some species of wasps are there just to hunt other insects to feed on or collect for their babies!



3: Mason Wasp (*Monobia quadridens*)

Flies: I have encountered many interesting flies on this plant. Some that are brilliant metallic green, or grey with lots of spines on them, are called tachinid flies, which parasitize larvae or caterpillars of other species. I have also seen lance flies, flesh flies, and spike flies, often sunning themselves on the plant early in early morning. Then there are hover flies. They are tiny yellow jacket-mimicking, mostly black-and-yellow flies. Until recently, I thought all of them were the same species, but now realize they are different, based on their markings. I have to sit and identify each species in the near future. There is a weird-looking fly called the Hunchback Fly (Fig. 4), which was seen several days last year. It seems that its thorax has a hunch, and is bent in such a fashion that the insect does not have to bend to drink nectar. It is supposed to parasitize or be a *kleptoparasite* of solitary wasps. That is all I found out about its natural history on the web, or even via Google Scholar! Also, a beautiful Wasp-mimicking Fly (Fig. 5) mimics wasps perfectly, as its name suggests, and was seen very often on this plant. They often are found basking on Indian Hemp, and spend a lot of time cleaning their legs and mouth parts.



4: Hunchback Fly (*Lepidophora lutea*)



5: Wasp-mimicking Fly (*Physocephala furcillata*)

Lepidoptera: I have recorded 28 species of **butterflies** visiting this plant, in my garden alone, in the last four or five years! Beautiful hairstreaks love this plant! I have had Hickory, Banded, Striped, and Acadian Hairstreaks (Fig. 6) visiting this plant. I see them on the same plant for three or more days at a time. I am not sure if they are the same individuals or different individuals every day. (I have noted a couple of individuals were the same for two days, based on their wing tears.) The Acadian Hairstreak was a surprise last year, as they are found mostly near wet meadows and marshy land where willows are common. I would think the nearest wet meadow is down in the Six Mile Creek gorge, at least 500 meters from my house, as the



6: Acadian Hairstreak (*Satyrium acadicum*)

crow flies. Some butterflies give a fleeting visit, and some spend more time feeding on the nectar. For example, Silver-spotted Skippers, Cabbage Whites, and sulphurs spend a fair amount of time feeding on various flowers, while swallowtails spend very little time on each flower, but they are not their preferred flowers. On the other hand, hairstreaks spend sometimes more than two minutes on one flower head, probing and nectaring.

Among **moths**, many day-flying species seem to utilize this flower as a nectar source. It is interesting that I have seen three similar-looking moths — Virginia Ctenucha, Yellow-collared Scape Moth, and the Grape Leaf Skeletoniser Moth — feeding on these flowers. They are similar, but like Russian dolls, one smaller than the other. To me, the most interesting diurnal moths are of the family Sesiidae (Fig. 7), which resemble bees and wasps! The first time I had a Peach Tree Borer Moth in my yard, I was thrilled, and wrote to the *NYSbutterflies* listserve about my joy. Some people wrote back to me in dismay, saying that it kills peach trees, and why did I want it in my garden! Luckily I do not have peach or apple trees in my garden. Since then I have had five more species of moths of this family. Last year I had plenty of beautiful Mint-loving *Pyrausta* Moths in my garden, and saw several of them nectaring on *Apocynum cannabinum*. A beautiful *Ailanthus* Webworm spent several hours one day, nectaring on this plant. Of course, among the flowers were concealed the caterpillar of the Wavy-lined Emerald (Fig. 8), which innocently moved among the spiders and other predators like a bunch of dried flowers (Fig. 9, arrow). And so the list goes on! I do not know of any night-flying insects that are also using this plant, as I have not explored the plant at night, but will keep it in mind for next season.

Beetles: Among these, the most brilliantly colored Dogbane Leaf Beetle or Cobalt Leaf Beetle (Fig. 10) sits stunningly in the bright sunshine. I have seen more than one on this plant, and also have seen a mating pair, so I hope next year I will have a few more of these. A bright red beetle with black spots, known as the Milkweed Beetle, is more common on *Asclepias* (milkweed) species. It sits shyly among the flowers, or hides under the leaves as soon as I approach with a camera. Yet another milkweed-feeding beetle, called the Milkweed Leaf Beetle, is occasionally seen on Indian Hemp. This plant serves as a host for their larva. On the flowers, I sometimes also see tiny fungus beetles nectaring among other small beetles.



7: Lesser Peach Tree Borer (*Synanthedon pictipes*)



8 & 9: Wavy-lined Emerald (*Synchlora aerata*)



Hemiptera and Homoptera: Red and Black Large Milkweed Bugs are seen occasionally. Sometime leafhoppers, such as the Red and Blue Leafhopper, are seen on the plant, but I have not seen them feeding on it.

Bees: Common European Honey Bees are always busy, flitting from one flower to another. They seem to visit many flowers before they are ready to head back to their hive. Several species of bumble bees, such as Common Bumble Bee, Two-spotted Bumble Bee, Tricolored Bumble Bee, and Yellow-banded Cuckoo Bumble Bee, are always buzzing from one flower to other. They spend very little time at each flower, but visit many flowers.

Tritrophic feeders, which feed on insects that feed on the plant, also hang around Indian Hemp. Assassin bugs and crab spiders sit concealed on the flowers, waiting to catch any insects that fall prey to them. I once watched a crab spider (Fig. 11, page 4) that had nabbed a hapless Honey Bee and was feeding on it. Soon an army of flies that feed on dead animals came to feed on the Honey Bee. Very often the spider would wave its arms (legs) to chase away the flies, but they stayed just out of reach while on the Honey Bee. I observed them for more than hour, and also got some video of their behavior. This is a **tetratrophic interaction** with the plant.



10: Dogbane Leaf Beetle (*Chrysochus auratus*)



11: A tetratrophic interaction between a Running or Philodromid Crab Spider (Philodromidae), its Honey Bee (*Apis mellifera*) prey, and small scavenging flies [See text, previous page.]

My scientific mind is full of questions, too.

From the plant's perspective, why are so many insect pollinators required for this plant's pollination? The flowers are tiny, so how much nectar do they produce? To check that, I once dissected a few flowers to see what kind of nectar tube they have, and how much nectar is visible. I barely saw less than a microliter of nectar in one flower, and others did not have any. How often is nectar replenished, after one insect has fed from that flower, as I see many insects visit the same flower during a one-hour period? What is the quality, meaning what kind of nutrients are offered, in the nectar?

From the insects' perspective, what kind of energy do they get from feeding on those flowers? I have watched wasps and bees spend very little time at each flower, while butterflies and moths seem to spend a lot of time at each flower, probing and drinking. Why these differences? Bees and wasps have wider feeding mouthparts, so do they suck the nectar quickly, while the butterflies have a narrow straw-like tube, so it takes longer for them to suck the liquid? Or can they probe deeper, so they can get a larger amount of nectar, compared to the short feeding tubes of bees and wasps? Among butterflies, I see some species visiting the flowers more often than others. For example, the Sliver-spotted Skippers and Cabbage Whites are

seen more commonly on these flowers, while Peck's Skipper, Tawny-edged Skipper, and Wild Indigo Duskywing, which were very common in my yard last year, very rarely visited these flowers. Why? I do not see any aphids on this plant. Are there any deterrents for these species?

I can go on asking so many questions. These questions make me more intrigued about the ecology of this plant, and I want to explore more in the coming years.

I have over 50 species of native flowering plants in my yard, besides grasses and non-native flowering plants, such as clovers, vetches, and ragworts. The most attractive plants to insects are *Apocynum cannabinum*, *Eupatorium sessilifolium*, *E. perfoliatum*, *Asclepias tuberosa*, *Asclepias incarnata*, *Asclepias syriaca*, *Monarda fistulosa*, *Echinacea* sp., and *Solidago* sp. So far I have observed the greatest number of species of insects on *Apocynum cannabinum*. Overall, I have



12: Brown-legged Grass Carrier Wasp (*Isodontia auripes*)

tentatively identified more than 75 species of insects on this plant. I have a garden variety of *Spiraea japonica* that flowers profusely, but very, very few species are attracted to this plant. So I see the value of native plants. I would love to acquire another sister species of Indian Hemp called Spreading Dogbane (*Apocynum androsaemifolium*). Any suggestions as to how I can obtain some?



13: An unidentified wasp nectaring on Indian Hemp

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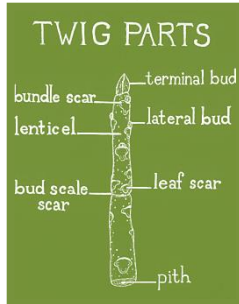
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To receive a colored version when *Solidago* is published, please ask Arie Tal to join our e-mail distribution list. Each colored version will also be posted on our website (www.flnps.org) after the next issue is produced.

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Butternut twig
(*Juglans cinerea*),
Ithaca, N.Y.,
winter 1972



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THE FINGER LAKES NATIVE PLANT SOCIETY STEERING COMMITTEE

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Please Contribute to Solidago

WE WELCOME CONTRIBUTIONS THAT FEATURE WILD PLANTS OF THE FINGER LAKES REGION OF N.Y. AND NEARBY. We include cryptogams (bryophytes, lichens, fungi, and algae) as "flora," and recognize that green plants provide habitats and substrates for these and many animals, especially insects. We are interested in zoological associations as long as plants are an integral part of the story.

We can use a wide spectrum of material in a variety of writing styles. Our regular columns include the **NAME THAT PLANT CONTEST** (identifying a mystery plant from images), **LOCAL FLORA** (plant lists from special sites), **OUTINGS** (reports of FLNPS-sponsored excursions), and **PLANT PROFILES** (on specific local plants). We also occasionally publish **APPRECIATIONS** (memorials to local botanists and naturalists), **REVIEWS** (of books, talks, meetings, workshops, nurseries), **LETTERS** (commentaries and letters to the editor), **ESSAYS** (on botanical themes), **VERSE** (haiku, sonnets, and poems of less formal structure), **ART** (botanical illustrations, plant designs, pencil sketches, decorations), and **PHOTOGRAPHS** (stand-alone images, photo essays, and full-page composite plates, or originals that can be scanned & returned). We also can always use **FILLERS** (very short notes, small images, cartoons) for the last few inches of a column.

Colored images in the online version will be converted into black and white before printing paper copies for mailing.

Please send *Solidago*
contributions & correspondence
to Robert Dirig, Editor, at
editorofsolidago@gmail.com

Deadline for the June 2017
issue is May 15th !

Name That Plant Contest

The photo from last issue's NAME THAT PLANT CONTEST [*Solidago* 17(4), page 3] was of **GREAT ROSE-BAY** or **GREAT LAUREL** (*Rhododendron maximum*). It is a common plant in the southern Appalachian Mountains, but also extends north into New York and New England. In the South, it can form dense, impenetrable thickets. In south-central New York, it is locally rare, with populations isolated and small, and often restricted to cold swamps, such as Michigan Hollow. It is occasionally cultivated for ornament, although much less so than other closely related *Rhododendron* species and hybrids. Thanks to all those who entered the contest, and congratulations to the winners:

Pat Curran, Bob Dirig, and Susanne Lorbeer.



THIS ISSUE'S MYSTERY PLANT IS SHOWN ABOVE. It is an end-of-winter challenge! The image is of the bark of an old individual of this tree, and no, it is not a reptile. It is uncommon locally, and generally likes wetlands. *Hints and suggestions are often provided to contest participants who try. Common and/or scientific names are acceptable. More than one guess is allowed.* Please submit your answers to

DAVID WERIER (Nakita@lightlink.com).

The photograph was taken by David Werier on 17 August 2016 in Passaic County, N.J.



LETTERS

What a beautiful issue of *Solidago*, Bob! [17(4), Dec. 2016.] (Come to think of it, they *all* are.) So many interesting, well-written articles! Thanks for all your hard work!

Betsy Darlington, Ithaca, N.Y.,
email of 11 December 2016



Hi Bob,

Wow..wow..wow! Congratulations on this last issue of *Solidago*. It is amazing. Each issue is, and then you somehow create another incredible one. One piece after another. And the entire issue is a work of art. Art and science. These are treasures.

It was impossible to put down. Your Stone Wall piece was fabulous — really pulled people, natural history, and cultural history into a piece that was a delight to the eye. And your Milbert's life cycle was exquisite.

And what a beautiful, personal tribute to Dick Korf.

Best,
Steve Daniel, Pittsford, N.Y.,
email of 7 December 2016



Hi Bob,

What an amazing last issue of *Solidago*! Your stone wall piece is exciting. I am savoring it, so have yet to finish all the details. Thanks!!

David Werier, Willseyville, N.Y.,
email of 11 December 2016



Bob,

You put together another very beautiful and interesting newsletter. Both Jim and I were particularly interested in your article about Dr. Korf. Thank you for sharing that with us all.

Susanne Lorbeer, Ithaca, N.Y.,
email of 7 December 2016



Good morning Bob,



I have an offer to distribute genuine **American Chestnut** (*Castanea dentata*) seeds to FLNPS members this spring, for planting, from **Allen Nichols**, President of the New York State chapter of The American Chestnut Foundation (TACF). I need to know how many people would like seeds, and the quantity desired (up to ten per person).* I will pass the total number to Allen, and he will send them to me. They can be picked up on my porch, or perhaps at another central location, in Ithaca. See this website about TACF [<https://www.acf.org/ny/>], and Allen's video for first-time American Chestnut planters at [<https://youtu.be/vVc1oLXelmg>].



Thanks, **Stan Scharf**, Ithaca, N.Y.,
emails of 8 January & 14 February 2017



2016 Solstice Gathering

Our annual party, which happened on the Winter Solstice this year, had a good turnout. Attendees enjoyed the "Identify-the-Decorations" Quiz (1), which was organized by **Arieh Tal**, who revealed the answers to the crowd (2). Another highlight was the annual Seed Exchange (3). **Norm Trigoboff** enjoyed the party (4). See a photo of the Food with A Native Element offerings on page 14. Photos contributed by **Rick Lightbody**.



Many thanks to all who organized, attended, and contributed to this event.

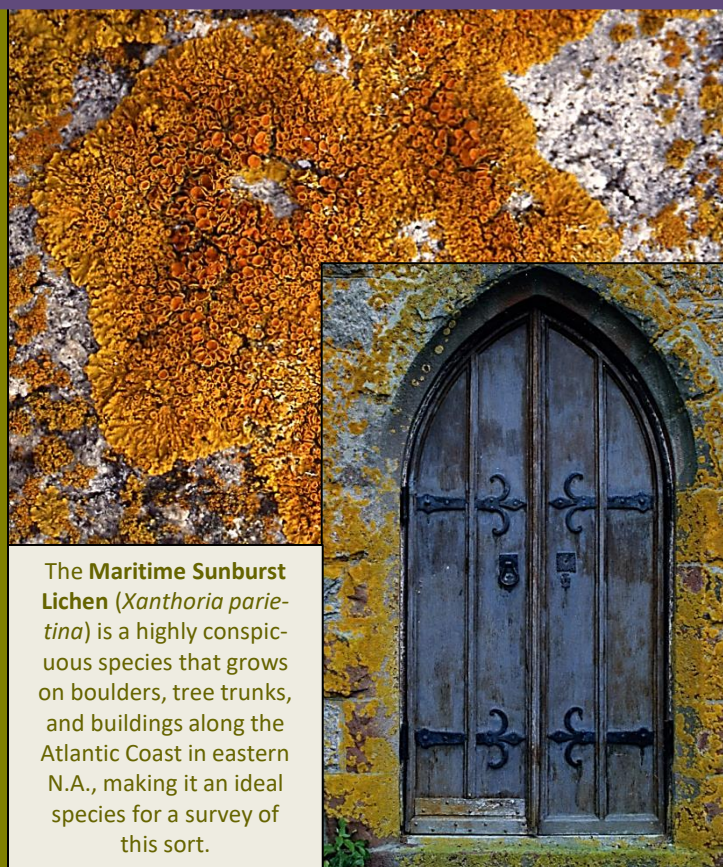


Hello, LETTERS (CONTINUED)

The **Maritime Sunburst Lichen** (*Xanthoria parietina*) seems to be spreading throughout eastern North America, based on observations and anecdotes. It's time that this is tracked by actual data. Recognizing this need, I've created an iNaturalist project where people can submit their observations, and I will curate the posts. You can view the project at [<http://www.inaturalist.org/projects/maritime-sunburst-lichen-in-eastern-north-america>], or search for it on iNaturalist under the title "Maritime Sunburst Lichen in Eastern North America." It's not clear yet what impacts this species will have on the current community of lichens. The first step to understanding this is documenting its distribution and spread. Please share information about this project to anyone you think would be interested.

Best,

Jessica L. Allen, Ph.D. Candidate
The New York Botanical Garden
The City University of New York Graduate Center
email: jallen@nybg.org, 17 November 2016



The **Maritime Sunburst Lichen** (*Xanthoria parietina*) is a highly conspicuous species that grows on boulders, tree trunks, and buildings along the Atlantic Coast in eastern N.A., making it an ideal species for a survey of this sort.

PLANT QUIZ

Plant Trivia by Norm Trigoboff

(Adapted from a Members' Night Presentation on 18 January 2017)

My last plant trivia contest (Trigoboff 2010) might have had too many questions. Maybe it should've had multiple choice questions. Maybe the prize shouldn't have been the chance to write the next trivia contest. At any rate, nobody won. Nobody entered. The following contest has fewer questions, includes multiple choice, a few hints, and has no prize. Please grade yourself, and email your score to Solidago's Editor.

1. Which species of tree makes the Black Forest black? *Hint:* It may someday do this to North American forests.
2. Where are you most likely to read the following sentence? "Big beautiful roses occupy your garden, but violets grow wild, so get some soon."
 - a. An electronics textbook.
 - b. War news from Afghanistan.
 - c. A horticulture magazine.
 - d. James Joyce's *Ulysses*.
 - e. A road sign in Central New York.
3. Some fern leaves, Romanesco broccoli, and many other things in nature have a "fractal" pattern, which means that they look the same however much you zoom in or out. This feature was recognized and studied by Benoit B. Mandelbrot, who coined the term "fractal." What does the **B** in Benoit B. Mandelbrot stand for? *Hint:* He chose his own middle initial.
4. What are the worst colors to use as trail markers in the Finger Lakes Region?
5. In the spirit of the kind folks who set up the FLNPS winter party plant contest each year (and reuse questions from other years), here is a question from the 2010 trivia contest: "How many Hemlock Woolly Adelgids does it take to screw in a light bulb?" (The Hemlock Woolly Adelgid is an aphid-like insect that feeds on Hemlock trees.)
6. Blueberry bushes are to carrot plants as:
 - a. Brown is to white.
 - b. Dollar bills are to silver dollars.
 - c. Dairy cows are to meat cattle.
 - d. Apple trees are to orange trees.
 - e. Resistors are to Norway spruce. (The Resistor is an aphid-like insect that feeds on Norway Spruce.)
7. What well camouflaged plant resembles a rock?
8. What is the largest conservation area in the U.S.? *Hint:* It has a large name and lacks native vascular plants.
9. What's the greatest age reached by a plant?
10. What plant's (English) common name and (Latin) family name have "seta" in them?
11. What's the worst weed in the world?

Please find the answers and references on page 16 of this issue.

MISCELLANY

Cayuga Floras Available Online

by Charles R. Smith

Over the years, I've managed to obtain the publications listed below as paper copies, either as originals or facsimile editions. They represent the major published contributions to the flora of the Cayuga Lake Basin and its surrounding area over a period of more than 250 years. They also make for some very interesting reading. A recent search of the internet led me to find these publications in digital format (PDF), which allows some of them to be searched online, and others to be downloaded and then searched for plant names, geographic locations, and other character strings. Be aware that many of the scientific and English names of plants have changed over the years, reflecting changes in our understanding of plant relationships, classification, and taxonomy by systematic botanists. So, you might have to do a bit of sleuthing to match some modern names with those used in the past, but that's part of the fun. You might even be able to download some of these files to your tablet or laptop and carry them into the field with you.


✿ **Observations on the Inhabitants, Climate, Soil, Rivers, Productions, Animals, in Travels from Pensilvania to Onondago, Oswego, and the Lake Ontario, in Canada, by John Bartram (1751).** Bartram's journal describing his summer trip from Philadelphia to Oswego in 1743. Also includes an account of a visit to Niagara Falls in 1750, by the Swedish botanist, Peter Kalm, for whom Linnaeus named the laurel genus, *Kalmia*. Bartram described "pigeons" (Passenger Pigeons) feeding their young as he traveled from modern-day Slaterville Springs to Dryden in July 1743. This is a fascinating account of eighteenth century American natural history, with rattlesnakes, wolves, mountain lions, and black bears frequently encountered on the trip. https://archive.org/details/cihm_11915.

✿ **Dudley, William Russell. 1886. *The Cayuga Flora. Part I, A Catalogue of the Phaenogamia Growing without Cultivation in the Cayuga Lake Basin.*** The first formally published account of the Cayuga Flora. <https://archive.org/details/cayugafioraparti00dudl>.

✿ **Wiegand, Karl McKay, & Arthur Johnson Eames. 1926. *The Flora of the Cayuga Lake Basin, New York.*** The second published treatment of the local flora, known to many of us, and still available from booksellers specializing in used or out-of-print books. <https://archive.org/details/floraofcayugalak1926wieg>.

✿ **Clausen, Robert T. 1949. *Checklist of the Vascular Plants of the Cayuga Quadrangle 42°- 43° N., 76°-77° W. Memoir 291, Cornell University Agricultural Experiment Station, Ithaca, N.Y.*** Perhaps less well-known than the other publications, it is simply a list of plants, with both scientific and English names, documented from the region.

<https://catalog.hathitrust.org/Record/009164413>.

✿ **Wesley, F. Robert, Sana Gardescu, & P. L. Marks. 2008. *Vascular Plant Species of the Cayuga Region of New York State.*** The most recent treatment of our local flora, using updated scientific names (no English names). It is available only on the website. Geographically, it encompasses both the Cayuga Basin of Wiegand & Eames and the Cayuga Quadrangle of Clausen. <https://ecommons.cornell.edu/handle/1813/9413>; <http://hdl.handle.net/1813/9413>. 

NATURAL
HISTORY

The Sassafras Path

by Robert Dirig



The sinuous margins of Sassafras leaves



WE CALLED IT THE “SASSAFRAS PATH” because of a lone *Sassafras albidum* tree that canopied its southern terminus, the only one within several miles. This well-worn footpath twisted around scattered trees and mossy knolls in an abandoned horse pasture, its course mirroring the sinuous margins of Sassafras leaves — and the convolutions of our adolescent lives.

My brothers, sister, and I often ran down our sloping lawn on summer afternoons, and plunged into the Path's green tunnel, ducking beneath Wild Apples and Staghorn Sumacs.[†] The blush of a wild rose, the wail of a brooding thrasher, or the flutter of a swallowtail² at nectar might arrest our step before we brushed by the Sassafras, and plummeted onto an unpaved country road. This shaded lane, nicknamed “Claudine's Road” for an elderly, neighboring cousin, arched downhill at either hand. Large tree trunks that bordered the road framed a whole gallery of magnificent Tiffany landscapes.³

The “Big Field” we entered seemed endless, stained with golden Buttercups, Scarlet Paintbrushes, Purple Daisies, Red Clover, and Blue-eyed Grass among its waving Timothy and sedge.⁴



A Big Field with golden Buttercups, Scarlet Paintbrushes, Purple Daisies

Redwings and Bobolinks⁵ cut the air, exchanging arias, while fritillaries, sulphurs, crescents, and admirals⁶ tumbled over the nectar-rich blooms. Huge rafts of cumulus floated overhead, casting fleeting shadows on the receding cobalt backdrop of the hills. How wonderful it was to cavort through this magical landscape with arms widespread, chasing a butterfly or a dream; startling a foraging Woodchuck or resting fawn;

flushing a Meadowlark⁷ from her domed cradle of spotted eggs.

But the field did end in an old, lichen-frosted fence that hid behind its stony face the secrets of our family's toil to make a home out of a wilderness.⁸ Climbing a crumbling stile, we entered another slanted, flower-spangled meadow, and then passed through its hedge into a third. A grove of stately White Pines reigned above a tangle of poplars, blackberries, and Meadowsweet⁹



The blush of a wild rose



Startling a resting fawn



A grove of stately White Pines

Notes

† Scientific names are listed in the order mentioned in the line of text preceding a footnote. An asterisk before a name indicates non-native plants. (Many familiar wildflowers of roadsides and meadows are naturalized from Europe.)

1) *Wild Apple (*Malus pumila*) and Staghorn Sumac (*Rhus typhina*); see story and images of the latter in *Solidago* 15(4), Dec. 2104, pages 1-6.

2) *Sweet Briar Rose (*Rosa rubiginosa*), Brown Thrasher (*Toxostomum rufum*), and Canadian Tiger Swallowtail (*Papilio canadensis*).

3) Splendid Tiffany landscape windows were produced by Louis Comfort Tiffany's stained glass studios (the same company that made the famous

lampshades) from the late 1800s to the 1920s. Some of these masterpieces are illustrated in *Tiffany Windows*, by Alastair Duncan (1980).

4) *Tall Buttercup (*Ranunculus acris*); “Scarlet Paintbrush” is an older vernacular name for *Orange Hawkweed (*Pilosella aurantiaca*); “Purple Daisies” is a colloquial common name for *Robin's Plantain (*Erigeron pulchellus*); *Red Clover (*Trifolium pratense*); Blue-eyed Grass (*Sisyrinchium* sp.); *Timothy (*Phleum pratense*); and sedges (*Carex* spp.).

5) Red-winged Blackbird (*Agelaius phoeniceus*) and Bobolink (*Dolichonyx oryzivorus*).

6) *Fritillaries* [Meadow (*Boloria bellona*) and Silver-bordered (*B. selene myrina*), Great Spangled (*Speyeria cybele*) and Aphrodite (*S. aphrodite*)];

Sulphurs [Clouded (*Colias philodice*) and Orange (*C. eurytheme*)]; *crescents* [Pearl Crescent (*Phyciodes tharos*)]; and *admirals* [Banded Purple/White Admiral (*Limenitis arthemis* group), here intergrading with Red-spotted Purple (*L. a. astyanax*)].

7) Woodchuck (*Marmota monax*), White-tailed Deer (*Odocoileus virginianus*), and Eastern Meadowlark (*Sturnella magna*).

8) See “Whispered Secrets of the Stone Wall” in *Solidago* 17(4), Dec. 2016, pages 15-19, for details and images.

9) White Pine (*Pinus strobus*), Trembling Aspen (*Populus tremuloides*), Common Blackberry (*Rubus allegheniensis*), and Meadowsweet (*Spiraea alba* var. *latifolia*).



A cooler verdant light



Tiny orange-and-black butterflies

crisp wings that resembled narrow, miniature windowpanes of leaded glass. The fringes of the Pond, where land blended into water, held a special fascination — as do all faerie realms, steeped in flux and promise.

Haunting the emergent rushes¹⁵ were ferocious Giant Water Bugs and the weird Water Scorpions,¹⁶ which preyed on small, aquatic animals; or we might rouse a Bronze Copper, Least Skipper, or Eyed Brown¹⁷ butterfly from the marsh that fringed the shore. Occasionally a water snake¹⁸ would dart around our feet and into the Pond. A wheeling Killdeer might wail its name if we treaded too close to its four marbled eggs; or a Spotted Sandpiper¹⁹ would teeter across the mud on the opposite shore.



A Killdeer might wail if we treaded too close to its marbled eggs



Hedges of willows, aspens, and grape edged this road

in this revegetating fallow, which we quickly traversed, en route to the woodlot.

There, our footpath wound around maples and birches, haircap moss and wood ferns,¹⁰ in a cooler, verdant light. We hurried ever downhill through the woods, soon approaching a sunlit opening. Here “The Corridor,” as we knew this passage, pitched down a steep slope. Following its course, we hastened past lacy dark Hemlocks and a huge Paper Birch,¹¹ before abruptly emerging into the warm splendor of June sunshine.

Butterflies fluttered everywhere over a *millefleurs* of cinquefoils, paintbrushes, daisies, chickweeds, and forget-me-nots; while a carpet of Mouse-eared Hawkweeds¹² gleamed in lemon splendor among scattered bluestone slabs. At our approach, a carou-

sel of tiny, orange-and-black butterflies¹³ swirled up from wet soil at the edge of a stream that fed the large triangular “Pond,” quickly resettling after we passed. A placid amphibian chorus changed to indignant croaks, as startled frogs plopped into the water at our step. Large olive-and-aqua dragonflies¹⁴ skimmed by on



The large triangular Pond

From the Pond's basin we climbed through an overgrown meadow dotted with blooming hawthorns, passed a low spot where Golden Ragworts²⁰ glowed prettily, and waded through flowers and sedges to a wide dirt road that was shaded by a colonnade of massive Sugar Maples. Hedges of pussy willows, aspens, elderberry, Meadowsweet, and grape²¹ edged this road, overhanging mossy ditches. An occasional window afforded glimpses of wide fields on either side, with a majestic, drooping elm²² accenting the horizon. A soaring Red-tailed Hawk screamed overhead; while a smaller bird²³ with the wonderful blue of heaven on top, the rusty orange of earth beneath, paused at a knothole in one of the big Maples we passed, where his paler mate was brooding. We usually stopped where the road sloped sharply downhill at the border of Elsie and Tom's neighboring farm, turning back the way we had come.

The scene was different from this perspective. We followed the road, instead of



We might rouse a Bronze Copper



Golden Ragworts glowed prettily

10) Sugar Maple (*Acer saccharum*), Yellow Birch (*Betula alleghaniensis*), Haircap Moss (*Polytrichum* sp.), Wood Ferns (*Dryopteris* sp.).

11) Hemlock (*Tsuga canadensis*) and Paper Birch (*Betula papyrifera*).

12) *Old-field Cinquefoil (*Potentilla simplex*), *Orange Hawkweed (*Pilosella auratiaca*), *Oxeye Daisy (*Leucanthemum vulgare*), *Grass-leaved Starwort (*Stellaria graminea*), *Water Forget-me-not (*Myosotis scorpioides*), and *Mouse-eared Hawkweed (*Pilosella officinarum*).

13) Pearl Crescent (*Phyciodes tharos*).

14) Green Darner (*Anax junius*).

15) Common Soft Rush (*Juncus effusus*).

16) Giant Water Bug (*Lethocerus americanus*) and Water Scorpion (*Ranatra* sp.).

17) Bronze Copper (*Lycaena hyllus*), Least Skipper (*Ancyloxypha numitor*), and Eyed Brown (*Satyrus eurydice*).

18) Northern Water Snake (*Nerodia sipedon*).

19) Killdeer (*Charadrius vociferus*) and Spotted Sandpiper (*Actitis macularia*).

20) Hawthorns (*Crataegus* spp.) and Golden Ragwort (*Packera aurea*).

21) Willows (*Salix* spp.), Trembling Aspen (*Populus tremuloides*), Big-toothed Aspen (*P. grandidentata*), Common Elderberry (*Sambucus nigra* ssp. *canadensis*), and River Grape (*Vitis riparia*).

22) American Elm (*Ulmus americana*); this tree persisted for decades, finally succumbing to Dutch Elm Disease in 2012.

23) Red-tailed Hawk (*Buteo jamaicensis*) and Eastern Bluebird (*Sialia sialis*).

retracing our route through the field to the Pond and Corridor, soon approaching an old white house with friendly windows,²⁴ winking through its hedge of huge Black Locusts.²⁵ We rarely passed without pausing to greet our cousins. There was always some natural history wonder to share, as part of the cheer that we brought and received at this house, and our aunt usually offered iced tea or a cookie to hold us for the march home. Then we continued along the road to the juncture of another footpath that brought us back to the Big Field, Claudine's Road, and the Sassafras Path.



A quaintly pretty sight, with a long, gauzy net bag swirling in the breeze

bird nests and migrations, and a later quest for mosses, added new interest to the same acres, which became ever richer, with increasing degrees of understanding.

So it was that we found nests of the Black-billed Cuckoo and Chestnut-sided Warbler in woody growth bordering the Sassafras Path; the larger platforms of Red-tailed, Broad-winged, and Cooper's Hawks in nearby woodlots; and the exquisite



A Cooper's Hawk nest in a nearby woodlot

Shaggy Moss²⁸ on a knoll in a wet, old pasture. Also mating Tiger Swallowtails, resting beneath a Maple-leaved Viburnum at dusk, with larvae of the Spring Azure²⁹ feeding on ivory inflorescences of the same shrub beside the road. And a rare, native, orange-flowered relative of Dandelion called Two-flowered Cynthia, flaming in an old field; plus Carrion Flower, Wood Horsetail, Black Chokeberry, Early Azalea, and Slender Ladies'-Tresses³⁰ on Elsie and Tom's property. Our parents, grandparents, and neighbors pointed out or saved other natural history treasures as they were discovered, lending excitement and wonder to each ramble and visit.

After high school, I left these idyllic Catskill meadows to study entomology and other natural sciences, and later to work, at Cornell University; while my siblings and cousins, in turn, scattered to build their own lives and careers (in publishing, teaching, farming, nursing, and lumbering). But I returned frequently, and the Sassafras Path still drew me to the fields, where the serenity and abandon of boyhood poured back into my soul. A new brother and cousin were growing, after most of us had moved away, and wandered the same acres. Their fresh insect and plant collections were accumulating, and a sketchbook was filling with drawings of birds, wildflowers, and moths.

Over several years, our Uncle Joe had maintained a large vegetable patch with-in sight of the Sassafras Path, but now it was unused; and as the Meadowsweet

HOW MANY THOUSANDS OF TIMES did we tramp those acres, marking daily, seasonal, and then yearly changes in the vegetation and fauna, as we grew and changed, ourselves! The long walk became a vital focus in warmer months — so much so that our mother, who justifiably worried about rattlesnake²⁶ bites, asked my brother to clear the Path with the lawnmower so we could more easily watch our footsteps. When my interest in entomology developed, I often carried a net, as did my sister and brother and one cousin. We were a quaintly pretty sight, with long gauzy net bags swirling in the breeze as we stalked the meadows for whole afternoons, seeking new butterflies, beetles, and dragonflies. A developing interest in plants prompted us to press, mount, and identify weeds, trees, ferns, and wildflowers. As my fascination with lichens grew, I scoured stone fences, limy erratics,²⁷ swamp shrubs, and roadside tree trunks for subtle surprises. Recording



I scoured limy erratics for subtle surprises



A new brother and cousin were growing, and wandered the same acres

24) Built by our great-grandfather after 1852.

25) *Black Locust (*Robinia pseudoacacia*). See images of these trees in *Solidago* 16(2), Dec. 2015, page 1.

26) Timber Rattlesnake (*Crotalus horridus*).

27) These blackish erratics are horizontal, sometimes massive slabs of *calcareous breccia*, a rock similar to conglomerate, but having *angular* (rather

than *rounded*) fragments embedded in a charcoal grey matrix.

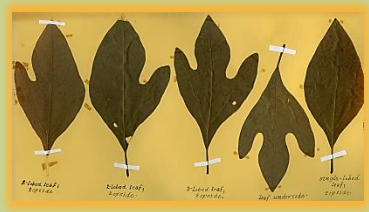
28) Black-billed Cuckoo (*Coccyzus erythrophthalmus*), Chestnut-sided Warbler (*Setophaga pensylvanica*), Red-tailed Hawk (*Buteo jamaicensis*), Broad-winged Hawk (*Buteo platypterus*), Cooper's Hawk (*Accipiter cooperii*), and Shaggy Moss (*Rhytidiadelphus triquetris*).

29) Canadian Tiger Swallowtail (*Papilio canadensis*),

Maple-leaved Viburnum (*Viburnum acerifolium*), and Spring Azure (*Celastrina ladon*).

30) *Common Dandelion (*Taraxacum officinale*), Two-flowered Cynthia/Dwarf Dandelion (*Krigia biflora*), Common Carrion Flower (*Smilax herbacea*), Wood Horsetail (*Equisetum sylvaticum*), Black Chokeberry (*Aronia melanocarpa*), Early Azalea (*Rhododendron prinophyllum*), and Slender Ladies'-Tresses (*Spiranthes lacera*).

thickets and Apple trees grew larger, and the Path lost its definition due to lack of mowing, we detoured through the more easily traversed garden plot. The Sassafras tree itself had succumbed to the ravages of road workers, who had widened Claudine's Road, following the "Erwin Plan"³¹ — which meant to us the loss of much-loved corners, where we had watched individual plants over the years.



We marveled over its four types of leaves



We cherished their golden glow in autumn



Lavender asters twinkled in the Big Field



I sat by a Closed Gentian until a bumble bee buzzed up

Our perfectly symmetrical, open-grown Sassafras tree had reached a 30-foot height, with a single trunk and hemispherical crown of highly artistic foliage. We marveled over its four types of leaves (left- and right-thumbed, double-thumbed, and simple), and cherished their golden glow in autumn. The olive-green twigs, with large terminal buds, arched upward in winter, producing a delightful, spicy fragrance when rubbed. The tree's overall novelty and charm had given it a hamadryadic mystique. We mourned that tree, and could not go by its knoll for many months after its demise.

But the Sweet Briar still thrived alongside, with artistic sepals splaying around scarlet hips; as did Highbush Blueberries.³² Lavender asters continued to twinkle in the Big Field, among the goldenrods and milkweed pods.³³ The stone fence knew a few more secrets, while the "Pine Tree Field" was mostly a coppice. The woods above the Corridor glowed in slanting sunbeams that filtered through blazing birch and maple leaves as we hurried to the Pond.

A lone Mallard³⁴ flushed at our approach, and I was surprised to see how much the Pond's verges had expanded through the growth of vegetation. A sod of Forget-me-nots now spread over the inlet marsh to become the best butterfly magnet in several acres. The soggy log raft from which we had dived as children was decorated with moss and rushes, and the surrounding fields were sere between mounded asters and masses of Pearly Everlasting.³⁵ Along the road, the disgruntled hedge slowly recovered from a violent cutback of a few years past. The white house still beckoned on its knoll behind the locust screen; but the remaining cousin was with us, so there was no rush of greeting, although our aunt and uncle's delight at seeing me made up for it. My brother and I soon followed the road to the main highway, not returning via the Big Field and Claudine's Road this time.

In due course, this younger brother and cousin left for college (to study music and journalism); but we were all home for holidays, and sometimes on weekends, and could ramble through the fields of our youth, comparing origins to our present lives. I was so busy with butterfly research, writing, teaching, botany, and lichenology at Cornell that it was often difficult to find time for a visit. But the meadows called, and I always took a walk when I returned.

AFTER A PARTICULARLY LONG ABSENCE, I came home one August afternoon to find my parents away. I ran out into the view — into meadows that blended with cobalt tiers, one after another, for twenty miles to the horizon. It had been so long! Emotions came welling as I passed through all the fields, while the natural history memories of a lifetime flooded back: the place where I sat by a Closed Gentian until a bumble bee buzzed up and butted itself into a flower; the Black Birch tree on which I found a Cecropia Moth³⁶ cocoon; the spot where my



Sweet Briar's artistic sepals splayed around scarlet hips



A sod of Forget-me-nots



Masses of Pearly Everlasting

31) **The Erwin Plan** (The Ten Year Highway Improvement Act of 1950) allowed Towns in N.Y.S. to obtain state aid for projects, up to \$7000 per mile. This new kind of road raised the roadbed above grade; graded backslopes and eliminated brush; widened the roadbed to at least 16 ft.; surfaced it with gravel or other suitable material to a depth of at least 1 ft.; provided 5-foot-wide shoulders; and ensured adequate drainage. "Claudine's Road" was part of the original one-

lane track through French Woods, which was widened in the mid-1960s into a two-laned dirt road, with shoulders and a deep ditch. This was part of the Cornell Local Roads Program (see www.clrp.cornell.edu/q-a/119-erwin.html).

32) Highbush Blueberry (*Vaccinium corymbosum*).

33) Crooked-stemmed Aster (*Symphyotrichum prenanthoides*) and Purple-stemmed Aster (*S. puniceus*); goldenrods [*Solidago* spp. and Grass-

leaved/Flat-topped Goldenrod (*Euthamia graminifolia*); and Common Milkweed (*Asclepias syriaca*).

34) Mallard (*Anas platyrhynchos*).

35) Pearly Everlasting (*Anaphalis margaritacea*).

36) Now formally called Meadow Bottle Gentian (*Gentiana clausa*), and a bumble bee (*Bombus* sp.); Black Birch (*Betula lenta*) and Cecropia Moth (*Hyalophora cecropia*).



Scarlet Cups flamed
in the spring



Worn Mourning Cloaks
basked in March sun



A fine clump of small, healthy Sassafras sprouts



Article and illustrations
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- 37) Viceroy (*Limenitis archippus*).
38) Common Shinleaf (*Pyrola elliptica*).
39) Dudley's Scarlet Cup (*Sarcoscypha dudleyi*), a large, brilliant red ascomy-

- cete that usually grew out of fallen, dead, soggy branches of Sugar Maple.
40) Mourning Cloak (*Nymphalis antiopa*).
41) Choke Cherry (*Prunus virginiana*).




After a summer outing, at the old house with friendly windows.
(The photographer, also an entomologist, is shown in the inset).



The Pond's surrounds, looking north

ACKNOWLEDGEMENTS: This essay grew out of early charismatic experiences with natural history that helped define my professional interests and a vivid sense of place. I am enormously grateful to my brothers, sister, and cousins, who shared countless rambles and outdoor treasures through the years. Our parents, grandparents, and neighbors helped us learn about the natural features of this magical landscape by offering inspiring books, specimens, and wisdom.

Many thanks to James Cassaro, Ed Cope, John F. Cryan, Matthew Dirig, Bente S. King, Scott LaGreca, Torben Russo, Amy Silbert, and Thelma Turner for helpful feedback on early and more recent drafts of the text. All the photographs were taken along the Sassafras Path or in adjacent meadows, around the Pond, and on the borders of roads through the region. 



2016 SOLSTICE GATHERING

Indiana Persimmon Pudding with Cinnamon *Crème Anglaise*

by Sandy Podulka

The **American Persimmon** (*Diospyros virginiana*) is native to the Southeast and Lower Midwest. The dioecious trees produce prolifically, and fruit is gathered from the ground as soon as it drops. The pulp is used widely in local cooking, especially in southern Indiana, where our daughter has just started college. A friend gave us a basket-full, and we learned that the major traditional recipe is **Indiana Persimmon Pudding**. This recipe is a blend of about four of the many different ones we found online.

Ingredients

2 cups persimmon pulp	1 tsp baking powder	¼ cup half & half
1 tsp baking soda	⅛ tsp salt	2 eggs
1 cup white sugar	½ tsp cinnamon	¼ cup melted butter
1 cup brown sugar	⅛ tsp nutmeg	⅛ tsp cloves
1¾ cups flour	1½ cups buttermilk	

Procedure

- (1) Combine pulp, sugar, and eggs.
- (2) In a separate bowl, add baking soda to buttermilk, and let stand until frothy.
- (3) In a different bowl, stir together remaining dry ingredients.
- (4) Add buttermilk mixture and dry ingredients alternately to pulp mixture, stirring well after each addition.
- (5) Stir melted butter into mixture.
- (6) Pour into a 9 × 13 inch baking pan, cover, and bake at 325°F.
- (7) 10 min. into baking, stir batter. Repeat 10 min. later. (This prevents it from becoming too cake-like.)
- (8) Bake 55 - 60 minutes. Pudding should be somewhat soft (tester will not come out clean), somewhere between the texture of a cake and a pudding.
- (9) Serve warm with warm **Cinnamon *Crème Anglaise***. →



WINNER OF BEST NATIVE RECIPE AWARD



American Persimmons at Cape May, N.J.,
7 October 2004. Photo by Robert Dirig

Cinnamon *Crème Anglaise*

From: <http://www.epicurious.com/recipes/food/views/cinnamon-creme-anglaise-355829>

Ingredients

- 2 cups whole milk
- 1 cinnamon stick, 3½ - 4 inches long, broken in half
- 6 large egg yolks
- 5 tablespoons sugar
- Pinch of fine sea salt

Procedure

Combine milk and cinnamon stick halves in medium saucepan. Bring just to a simmer over medium heat. Remove from heat; cover and let steep 1 hour.

Whisk yolks, sugar, and salt in medium bowl. Return milk mixture to simmer. Gradually whisk milk mixture into yolk mixture. Return mixture to saucepan. Stir constantly over medium heat until sauce thickens and an instant-read thermometer inserted into mixture registers 180°F., about 3 minutes (do not boil). Remove from heat. Strain through sieve into small bowl. Serve warm, but store in refrigerator.

This can be made 3 days ahead and chilled.



One of the highlights of our Solstice Gatherings each year is the potluck of "Foods With A Native Element." Here, participants are sampling various dishes. Photo by Rick Lightbody.

REVIEW

Members' Night 2017

by Rosemarie Parker



If you missed this year's **Members' Night**, you missed an eclectic mix of botanical topics and presentations (and I hope you will help us ensure that future programs are equally interesting by looking at the end of this article under "Feedback"). Thanks to **Rick Lightbody** and all the presenters for putting together a very pleasant and informative evening. Here is a quick rundown, according to my notes.

Gin Mistry has a great native garden, sharing space with **Nari Mistry's** rock garden (remember last year's Members Night?). Gin gave a photo tour of spring, with lots of hints about what species are easy, how to get more Jack-in-the-Pulpits, etc. Everyone was invited to visit; Gin and Nari love showing their gardens to fellow plant lovers.

David Keifer encouraged us to visit Death Valley to see native plants, in a very different environment than the Finger Lakes. He recommends a visit in late March to early April, for reasonable temperature and lots of bloom. The desert bloom is spectacular in high rainfall years, but his shots from a "normal" year showed many treasures to find.

We explored the Shaw Nature Preserve near Gray Summit, Missouri, with **Arieh Tal**. The Preserve is 2400 acres of reconstructed tall grass prairie, and most of the plants are familiar to central New Yorkers. Arieh's photos showed lots of butterflies, lots of great blooms, and encouraged me to take a small detour the next time I am near St. Louis. Arieh recommends July-September for peak bloom.

Mary Squyres showed a very lively, time-lapse video progression of seasonal greening, blooming, shifting, and fading in a large perennial garden around her home. Native plants and ornamentals popped up, shriveled, and keeled over in time with the music. Fun!

Norm Trigoboff kept us guessing with his offbeat trivia contest. The connection between native plants and electronics? "Big Beautiful Roses Occupy Your Garden But Violets Grow Wild" or "Black Bananas Really Offend Your Girlfriend But Violets Get Welcomed" are both mnemonics used to remember the increasing strength order of color coded resistors. Factoid of the night for my mind was that Flying Squirrels are the most common squirrels in our Finger Lakes woods. We see the diurnal Grey Squirrels all the time, but those nocturnal guys are more numerous. Huh! [See Norm's "Plant Trivia Quiz" on page 8 and the Answers on page 16 in this issue.]

New York has some fascinating and beautiful rare flora, and **Ken Hull** is always on the lookout for a new spotting. He took us through a series of his finds, often traveling with botanists to undisclosed locations. And then hunting. He said that it took two hours for four people to find *one plant* (I think it was the White Camas) in an area about the size of the meeting room. That's dedication, and I am glad the single plant didn't get stepped on. Also glad that Ken brought a photo so I can enjoy it vicariously.

Robert Wesley showed some stunning photos of plants, landscapes, and rural scenes through the seasons. It is always such a pleasure to see Robert's photos. I particularly enjoyed his images of old graveyards.

Jean Gerow has been exploring the Ithaca Children's Garden, and she closed out the evening with a view of the many species (beyond plants & mini-people) that inhabit this oasis. Many native species have been planted over the years, especially in the bioswale, and the local fauna have noticed. Visit the bioswale for lots of amphibians, at least one Snapping Turtle (living, not concrete), and loads of late summer bloom.

Displays on the exhibit table included a 120-year-old Hemlock round from a Cornell Natural Area that had clearly had quite a range of conditions over its lifetime. If you were lucky, you might have caught **Susanne Lorbeer** with a display too small for the table: It was a wooden thimble, carved and painted by **Bill Dilger**, with recognizable species of purple, white, and yellow violets.



Feedback

Feedback forms were handed out at the event, to help the Steering Committee determine interest in continuing Members' Night, and what to change or maintain. If you did not attend, especially if it was not due to a conflict, we would really appreciate hearing from you about why you chose not to attend. We try to present programs of interest to the broad range of FLNPS members, and it helps to hear your opinions. Please send comments to flnps-mn2017@ricklightbody.com or info@flnps.org.

Thanks!

Answers to Norm Trigoboff's Plant Trivia Quiz on Page 8

1. Norway Spruce.
2. A, an electronics textbook. The sentence is a mnemonic aid for resistor values (and one piece of taxonomy that the molecular biologists can't ruin).
3. Benoit B. Mandelbrot. (For those who still have blank looks on their faces: the "B" stands for Benoit B. Mandelbrot, the "B" in that Benoit B. Mandelbrot stands for Benoit B. Mandelbrot, the "B" in that Benoit B. Mandelbrot stands for Benoit B. Mandelbrot. Need I continue?)
4. *White* may be hard to spot in snowy weather. *Grayish-brown* shades are often hard to spot on tree trunks. *Green* is hard to spot among leaves. Unnatural colors, such as *hot pink*, show up well, but mar the outdoor esthetic experience. Come to think of it, the only good colors are shades of *blue*, but even these may be mistaken for patches of sky. One other complaint: The people who mark trails scrape off bryophytes before they paint.
5. Two.
6. C, the bovines. Blueberries are harvested repeatedly from blueberry bushes; carrots are harvested once.
7. Living Stone, *Lithops* spp., a genus of desert plants with many species native to southern Africa, looks much like a rock. Alas, it was not discovered by Stanley.
8. According to <http://www.papahanaumokuakea.gov/about/>, "The Papahanaumokuakea Marine National Monument is the single largest conservation area under the U.S. flag, and one of the largest marine conservation areas in the world... 139,797 square miles of the Pacific Ocean... larger than all the country's national parks, combined."
9. We have good evidence that King's Holly, *Lomatia tasmanica*, has formed a clone 43,000 years old (last Thursday).
10. Horsetail and Equisetaceae.
11. Purple Nutsedge, *Cyperus rotundus*, according to several sources (e.g., Holm *et. al.* 1977). The plant reproduces by seeds, tubers, and pieces of tubers, resists most herbicides, may survive plastic mulch (sheet plastic), is allelopathic, and is expanding its range, helped by global warming.

References

Holm, L. G., D. L. Plucknett, J. V. Pancho, & J. P. Herberger. 1977. *The World's Worst Weeds: Distribution and Biology*. Honolulu: University Press of Hawaii.

Trigoboff, N. 2010, February. Plant Trivia/Answers. *Solidago* 11(1): 2, 5.



Thank You!


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BEST WISHES to FLNPS members
(and all others in our reading audience)
for joyous revels with the coming
pageant of spring flora!

— Robert Dirig
(editorofsolidago@gmail.com)



On Our Website ---

Did you know that the FLNPS website has a "plant search" feature that allows you to search for garden-worthy natives by features like bloom time, need for sun or shade, or showy fruit? Use the "advanced search by plant characteristics." There is a link on the Home Page under "Gardening with Native Plants," and at the top of the list of "Native Plants of Garden Interest." And should you disagree with the results, or wish to add another worthy species, just send your thoughts to Rosemarie via the info@flnps.org contact. 

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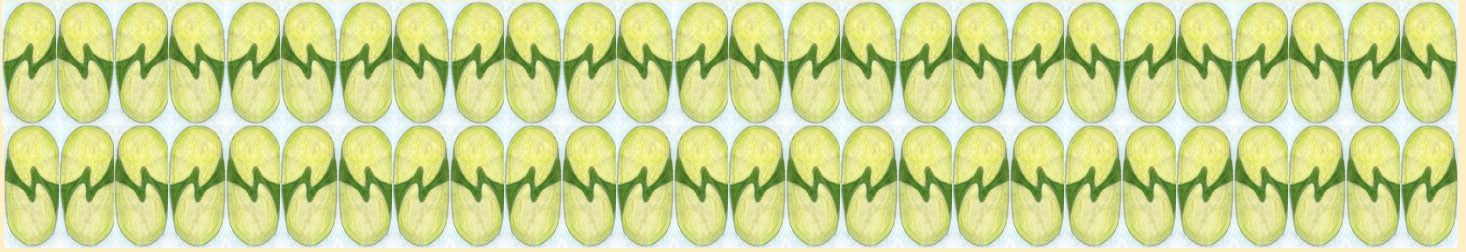
Akiva Silver's article on "White Pine Blister Rust and *Ribes*" from *Solidago* 15(1), pp. 8-10, March 2014, was reprinted in *On The Fringe* 34(4), pp. 13-15, in December 2016.

Harold W. Gardner's article on "The Role of Epigenetics in the Origin of Regional Ecotypes" from *Solidago* 15(4), pp. 12-13, December 2014, was also reprinted in *On The Fringe* 33(3), pp. 3-4, in September 2015.

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Finger Lakes Native Plant Society



Design from part of a single, 1-thumbed Sassafras leaf (*Sassafras albidum*) by Robert Dirig.

Talks & Activities, Late Winter & Spring 2017

March 10-11 — Friday & Saturday — *The 2017 Annual Ithaca Native Landscape Symposium*, at Cinemapolis, 120 East Green St., in Ithaca, N.Y. This opportunity to hear so many talented speakers on such a broad range of topics related to native plants, in Ithaca, is not to be missed. **FLNPS members get a discount** (≈ a continuation of the earlybird discount) *by using the promo code 'GROUP' when you register*. Saturday's schedule includes a screening of the film *Hometown Habitat — Stories of Bringing Nature Home*, directed by CATHERINE ZIMMERMAN, and featuring DOUG TALLAMY (good reviews!). Catherine will also give a talk about making meadows work, a good follow-up to our February FLNPS talk! Please see the Symposium website for details on schedule, speakers, location, registration, and credits: <http://www.ithacanativelandscape.com/>.

March 15 — Wednesday — 7:00 p.m. *Earthworms and Understory Plants*, a talk by ANNISE DOBSON. Unitarian Church Annex, Ithaca, N.Y.*

March 18 — Saturday — 2:00 p.m. *Tree Identification at Stevenson Preserve*, a walk, led by AKIVA SILVER.

Join Akiva for a walk in Enfield, co-sponsored by the Finger Lakes Land Trust. The walk will focus on identification, natural history, wildlife value, the role of invasive plants, as well as survival uses of trees and shrubs. The walk will last two hours or more, so please come prepared with appropriate clothing and footwear for the weather and terrain. No registration required. Except in the case of extreme weather, the walks go rain, sun, or snow. Please check the FLLT Facebook page for updates. Meet at the Preserve parking area on Trumbull Corners Road: From Ithaca, take Route 13 South to Route 327. Turn right onto Route 327 (Enfield Falls Road) and go 4½ miles to Trumbull Corners Road. Turn left and go approximately ½ mile to the Preserve parking area on the right side of the road. See < <http://www.fllt.org/preserves/stevenson-forest-preserve/> > for more information.

April 19 — Wednesday — 7:00 p.m. *Milkweed or Swallowort?*, a talk by ANTONIO DITOMMASO. Unitarian Church Annex, Ithaca, N.Y.*

May 17 — Wednesday — 7:00 p.m. *Blue Ridge Mountains: Ecology of Roan Mountain*, a talk by CHARLES R. SMITH. Unitarian Church Annex, Ithaca, N.Y.*

May 20 — Saturday — 9:00 a.m. to 2:00 p.m. *Ithaca Plant Sale*, Ithaca High School, N. Cayuga Street. The FLNPS will sell ethically propagated native plants at this grand horticultural fair!

May 21 — Sunday — 1:00 (12:45) p.m. to 4:00 p.m. — *Ringwood Flora*, a walk led by MIKE HOUGH.

Mike will lead a walk in Cornell's RINGWOOD NATURAL AREA, seeking Wood Betony (*Pedicularis canadensis*) and other treasures. Meet at the parking area on Ringwood Road at 1:00 p.m., or at CCE† at 12:45 to carpool to the site (parking is limited on Ringwood Road). This moderate hike will last about three hours.

June 4 — Sunday — all day — *Thatcher's Pinnacles and Vicinity*, an outdoor program led by DAVID WERIER, jointly sponsored by the New York Flora Association.

We will explore the interesting and botanically rich Thatcher's Pinnacles area, which occurs on the rim of the Cayuga Inlet Valley. This is primarily a dry upland site, but if time allows, we may venture down into the valley. The going should be relatively easy, although we may go off-trail, and we will be climbing in elevation. We should see many interesting species at this local botanical hotspot, including *Amelanchier sanguinea* (Round-leaved Shadbush), *Calamagrostis perplexa* (Clausen's Reed Grass), *Carex siccata* (Dry-spiked Sedge), *C. willdenowii* (Willdenow's Sedge), *Ceanothus americanus* (New Jersey Tea), *Elymus trachycaulus* (Wheat Grass), *Lilium philadelphicum* (Wood Lily), and more. A carpool will leave Ithaca at 9:00 a.m. Otherwise, we will meet near West Danby, N.Y. at 9:30 a.m. We will have lunch in the field. **Pre-registration is required.** To register, and for questions, please contact David Werier at Nakita@lightlink.com.

September 8-9 — Cornell's School of Integrative Plant Sciences BioBlitz, Cayuga Nature Center. Details: <https://sips.cals.cornell.edu/news-events/sips-bioblitz>.

*Talks are held at the Unitarian Church Annex (enter on East Buffalo St.) in Ithaca, N.Y., beginning at 7:00 p.m. An elevator is available.

†Most FLNPS walks convene at the Tompkins County Cooperative Extension (CCE) center at 615 Willow Avenue in Ithaca, N.Y.
We are still developing our programs for the year. Please watch our website (www.flnps.org) for details and updates.