



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. 3



October 2017

WILD GARDENING

Photos by
the author



Elderberry, The Caretaker

by Akiva Silver



AMBUNCTIOUS, energetic, and never offended, **ELDERBERRIES** are powerful allies to wildlife, foragers, medicine makers, and gardeners. Elder plants have been used for millennia by people. The uses of elder are as varied and unique as the people who use them.

In general, they are extremely vigorous shrubs growing in thickets, roadsides, wetlands, and forest edges and openings. They are shade-tolerant, but love the sun.

The Species

Sambucus canadensis, the American Elderberry, is the species I am most familiar with. It is closely related to the European species, *Sambucus nigra*. The two are so closely related that many botanists consider them the same species. In reality, they are different enough from each other that *S. canadensis* will thrive here in New York State, while most cultivars of *S. nigra* will languish.

There are other species of elderberries. *S. caerulea* is from the western U.S., and produces a large tasty blue berry. *S. racemosa*, native to the eastern woodlands, makes a toxic bright red berry.

Sambucus canadensis grows abundantly in the Northeast, and across most of eastern North America. It is a vigorous plant, producing copious amounts of shoots, leaves, and berries. The tiny, dark berries form in large clusters, ripening towards the end of the summer.

Healthy, Productive Stems

One-year-old shoots from well established plants can sometimes reach 8 feet tall in a single season. Many plants will produce flowers and fruit on new wood that is only a few months old. That is totally amazing to me — a stem rising out of the ground in the spring, and winding up taller than me, and covered in fruit by the end of the summer. How can a stem be that vigorous and productive?

As stems grow older, they begin to decline. After 5 or 6 years, elderberry stems will start to die. If they are not replaced by new shoots, then the whole bush can go into decline. Wild elderberry bushes rarely live past 20 years of age, but with human help they can live for much longer.

The reason elderberries can live longer with people is because we can cut them down. This may sound counter-intuitive, but that is what shrubs really need. Most shrubs have evolved to grow in open areas with abundant grazing and browsing animals. They are rejuvenated by the disturbance of a large herd of herbivores or by fire. When old stems die, there is new room for young shoots.

I cut most of my elderberry plants right to the ground every year or every other year. The timing is important. I cut them in the winter when they are dormant, and most of their energy is stored in their root systems. In the spring, the plants

flush an abundance of vigorous canes. These canes will reach 8 or more feet tall over the summer, and produce copious amounts of flowers and fruit. It is important to note that some individuals will not flower on first year wood. Second year canes are generally the most productive. For individuals that do not flower on first year wood, I prune out any stems that are over 2 or 3 years old.



Elderberry just a month after being cut down to the ground.

Fruit

Elderberries are tiny, dark berries with a unique flavor. I don't think of them as a berry to go out and gather handfuls of to stuff into my mouth. They are not sweet at all. They have a pretty strong wine-like flavor. Elderberries are best not eaten fresh, but processed into one of many possibilities.

They are more medicine than food, in my opinion, but can certainly be used for both. Many folks bake elderberries into pies, make jam, wine, syrup, etc. We often add frozen elderberries to smoothies or oatmeal.

The real attribute of the elderberry lies in its powerful immune boosting quality. Elder syrup taken regularly at the onset of a cold has kept me healthy numerous times. Some people may regard this as folklore, but I know that it's real — and so does the exploding elderberry industry (which is expected soon to surpass *Echinacea* in herbal supplement sales).

Harvesting

I have heard people bemoan the tediousness of picking elderberries. This is too bad, and is just based on a lack of information. Elderberries come in great big clusters that are easily snapped off the bush. The berries are attached to thin stems in these clusters. To de-stem the berries, place the cluster in the freezer for 20 minutes or so. Tap the frozen cluster on a cookie sheet and all the berries will fall off easily. You can then put them in a bag and keep them in the freezer until you are ready to use them.

Wood

Elderberry stems have a soft pith in their centers, which is similar in texture to Styrofoam. They have weak, brittle wood surrounding the pith. This pith can be punched out with a thin round file or a nail. Taking out the pith will leave you with a hollow stem which has multiple uses. I have seen friends turn them into flutes, my wife has made crayons, and I have used them as maple spiles.

Apparently, the wood of elderberry is poisonous when fresh. So, if you are going to use elder stems for flutes or maple spiles, let it dry before using. I've never heard of anyone having any negative effects from using elder wood for these projects, and I've personally drunk a lot of maple sap collected from elder stems.

Flowers

The flowers of elderberry come in great big white clusters, starting in early July, and sometimes continuing much later into the summer. By blooming late, elderberries reliably miss typical spring frosts that damage plants like apples, peaches, and plums.

The flowers are a magnet for pollinating insects. There is a huge flurry of activity around the blooms. They are also edible and medicinal. Elder flowers are eaten as fritters, and they are tinctured and/or dried to make a powerful immune boosting medicine.



The self-pollinating elderberry variety 'York' showing off its huge clusters of large berries.

Propagation

I used to live on property where the owners regularly mowed down a huge patch of elderberry. Every time the plants would really get going and begin to flower, they would knock it all down with a brush hog. I felt so frustrated at this, that I decided to dig up and save some of the patch, even though I had nowhere to plant it. In the middle of summer on a hot day, I dug up a clump and tried to stuff it into a pot. It was too big for any pot, so I cut it into sections with an old axe and stuffed each section into a pot. Amazingly, they all lived. I planted them a year later on my own property, where they continue to thrive today, eight years later.

Propagating elderberries is very easy and rewarding. There are numerous methods, ranging from cuttings, root divisions, and seed. I have the most experience with cuttings. I have used both hardwood (dormant cuttings) and softwood (summer) cuttings. Both methods have worked very well. I like to gather hardwood cuttings late in the fall and plant them out into nursery beds. Each cutting is only as long as the section between leaf nodes. I prepare the cutting so that it has a node on top. No node is needed on the bottom. I don't use any rooting hormone on elder cuttings, and usually have a 90-100% success rate with hardwood cuttings, and only slightly less with softwood.

Elderberries are very sensitive to being transplanted after they root, if you do not wait until they are dormant. Once dormant, they are easy to transplant. If in full leaf, they wilt easily and die. To prevent this, cut back at least 90% of the leaf matter. This will prevent wilting, and they will have a much higher success rate.

I have also grown elderberries from root cuttings. One- inch fragments of root, planted at or just below the soil line in early spring, can lead to enormous 6-foot plants in a single season. However, I have noticed that if I take root cuttings later in the season, they rarely sprout above the soil line at all.

I have not grown elderberries from seed, but have heard from a friend that with stratification, it is easy.

Planting

Elderberries are not fussy about a planting site, but they will respond to favorable conditions with extreme generosity. Many people think that elderberries love wet soil, and mistakenly plant them in muddy, anaerobic conditions. They can survive in places like that, but they will rarely thrive. Give elderberries a rich, well drained soil, and they will explode with growth and flower right away.

Some individual elderberries are self-pollinating, but many are not. If you are planting seedlings or varieties that need a pollinator, then a 6-foot spacing works out well.

Elderberries are shade tolerant, and can do quite well in half a day of sunlight or in dappled shade. However, they will respond to abundant sunlight, the way they do to good soil, with excellent growth.

Commercial Production

There is a world market for elderberry products, primarily syrup and tincture, but also for dried berries and wine. Elderberries are consumed widely in Europe and increasingly in North America. The University of Missouri is leading the way in commercial elderberry research, as numerous elderberry farms continue to spring up throughout the country. The potential exists for anyone with motivation to make an income from growing elderberry. The plants are vigorous and easy to grow, with no significant pests, and very high, reliable yields.

Wildlife

Elderberries are loved by song birds and game birds, but are often so productive that it is not hard for people to harvest them at the same time. I've never lost a crop of elderberries to birds the way I do with blueberries or serviceberries some years. Elder flowers are an excellent source of nectar for pollinators. The leaves are loved by deer (probably too much). Deer browse elderberry so heavily that local populations of the plant are in decline here.



Hardwood elderberry cuttings prepared and ready for planting.

The elderberry is a sacred plant to many people. They say that elderberries watch over children. My kids love to be around the robust elderberry bushes on our farm. They play under the shade of the plants, gather berries, and make crafts with the unusual stems. Elderberries are loved by birds, kids, tree huggers, foragers, native plant enthusiasts, permaculturists, right wingers, and left wingers. Every farm, homestead, and park would do well to have an elder patch somewhere to watch over us all.



We named this self-pollinating, productive elderberry plant "Bubby," and have taken numerous cuttings from it over the years. Like many varieties, it is able to produce fruit on one-year-old wood. Most of the stems in this picture are 1-3 years old.

Twisted Tree Farm,

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New York, 14883, United States.

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Thank You!

MANY THANKS to all who contributed to *Solidago*! For Volume 18, No. 3, we thank **WRITERS** Harold W. Gardner, Meena Haribal, Julia Miller, Rosemarie Parker, Sandy Podulka, Akiva Silver, Ariele Tal, Norm Trigoboff, David Werier, Bob Welsey, and Robert Dirig, whose contributions made this issue special. **ILLUSTRATIONS** were loaned by Akiva Silver [pp. 1-4]; David Werier [p. 6, top left]; Meena Haribal [p. 6, bottom left]; Bob Wesley [p. 6, top right]; Sandy Podulka [p. 6, bottom right]; Julia Miller [p. 7, two, middle left]; Harold W. Gardner [p. 7, two, bottom]; Ariele Tal [p. 10, top right]; and Robert Dirig [pp. 5; p. 6, bottom center; p. 8; and p. 10, bottom right]. **CALENDAR ITEMS** were organized by Rosemarie Parker. **LAYOUT and DESIGN** by the Editor. **PROOFREADING and TECHNICAL ASSISTANCE** by Ariele Tal and Rosemarie Parker. **PRINTING** of paper copies by Gnomon Copy, Ithaca, N. Y. And **MAILING** by Rosemarie Parker and Susanne Lorbeer.

BEST WISHES to FLNPS members (and all others in our reading audience) for joyous revels with colorful autumn foliage! — **Robert Dirig** (editorofsolidago@gmail.com)

Solidago

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To receive a colored version when *Solidago* is published, please ask Arieh 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.

Contents

Witch Hazel
(*Hamamelis virginiana*)
in golden
bloom
and leaf,
Ithaca, N.Y.,
12 Oct. 2003



WILD GARDENING

- Elderberry, *The Caretaker* (Akiva Silver) • 1-4
Defeating Japanese Stilt Grass with Aggressive Natives
(Harold W. Gardner) • 7

COLUMNS & MISCELLANY

- Thank You! (Robert Dirig) • 4
Front Matter & Contents • 5
Name That Plant Contest (David Werier) • 6
Letters (Bob Welsey, Sandy Podulka, Meena Haribal, Julia Miller) • 6-7
A Beautiful Butterfly Predator (Robert Dirig) • 10

PLANT PROFILES

- Glimpses of a Rare Native: Violet Wood Sorrel
in the Finger Lakes (Robert Dirig) • 8
An Unexpected Find (*Solidago squarrosa*) (Arieh Tal) • 10

LOCAL FLORA

- Two Common and Under-collected Bryums
(Norm Trigoboff) • 9

FLNPS CALENDAR, AUTUMN 2017

- FLNPS & Other Botanical Programs • 9

Please send *Solidago*
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editorofsolidago@gmail.com

Deadline for the December 2017
issue is November 15th!

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.



NAME THAT PLANT CONTEST

The photo from last issue's NAME THAT PLANT CONTEST [Solidago 18(2), p. 6] showed the bizarre flower of an orchid, **LARGE WHORLED POGONIA** (*Isotria verticillata*). It usually has only one flower per plant, but Charlie Smith sent me an image he had taken in 2011 in Caroline of an individual with two flowers! Nice find, Charlie. Thanks to all those who entered the contest, and congratulations to the winners: **Todd Bittner, Bob Dirig, Kris Gilbert, Susan Larkin, Susanne Lorbeer, Charlie Smith, and Robert Wesley.**



This issue's mystery plant is shown above. 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** at

Nakita@lightlink.com.

The photograph was taken by David Werier on 14 August 2017 in Cayuga County, N.Y.



◀ A much darker Hermit Sphinx caterpillar was photographed on a Mountain Mint (*Pycnanthemum sp.*) in Ithaca, N.Y., by **Meena Haribal**, who wrote: "This is the third time I've seen [this moth] in ten years. The first was at Robert Treman [State Park, same individual as in the photo at the right], the second time an adult came to my moth sheet, and now this is evidence that an adult was there, somewhere in my garden, last month!"

*Ithaca, N.Y.
6-10 September 2017*



Hi Bob,

I'm having trouble trying to identify this little skipper. If you are willing to take a look at the picture, I'd also be curious how usual or unusual it is.

Thanks,
Bob Wesley
Ithaca, N.Y.

21 August 2017



Hi Bob,

It's a **Wild Indigo Duskywing**

(*Erynnis baptisiae*), a native skipper that used to feed exclusively on Wild Indigo (*Baptisia* spp.) and Wild Lupine (*Lupinus perennis*), and thus was rare. In 1979, it began to use widely naturalized Crown Vetch (*Securigera varia*) as a larval host, and has become common in the Northeast! There are three broods a year, with adults on the wing in May, July, and Sept.-Oct. It's the only *Erynnis* we have in the Finger Lakes Region that flies after June. Thanks very much for the beautiful photo.

— Bob

Hi Bob,

I found a few of these sphinx moth caterpillars on our basil plants [*Ocimum basilicum*]. Can you identify them? I've scoured my books and the web to no avail; I can't find any with a horn or projection on the head as well as the tail end. They were eating basil leaves. See photos on this link:

https://www.facebook.com/permalink.php?story_fbid=425241151203965&id=100011542517315&pnref=story

The larger caterpillar (*below right*) was found on September 1st.

Thanks, **Sandy Podulka**
Brooktondale, N.Y., 31 August – 1 September 2017



Hi Sandy,

They are **Hermit Sphinx** caterpillars (*Lintneria eremita*). I've seen adults a few times in the Ithaca area (*below left*). The larvae feed on mints (Lamiaceae), which include basil. Known hosts are *Hedeoma*; *Lycopus*; *Mentha arvensis*, *canadensis*, and *×piperita*; *Monarda didyma* and *fistulosa*; *Pycnanthemum virginianum*; and *Salvia azurea*, *officinalis*, and *reflexa*. **Basil seems to be a new foodplant record!** The moths come to lights, and have dark, well camouflaged forewings, and black-and-white-striped hindwings. Wingspan is ca. 2½ inches. Thanks for the larval photos and report for this unusual Finger Lakes native!

— Bob

▼ ♀ at UV light, Lower Treman State Park, S of Ithaca, N.Y., 11 July 2015, 11:00 p.m.



LETTERS

Hi Bob,

I am sure some of the readers have visited Cornell's ETNA FRINGED GENTIAN AREA to see the gentians (*Gentianopsis crinita*). I visited this weekend and was surprised to find only a few plants. When I visited last year, I saw ten times more flowers. I could be too early to see peak bloom, but I am guessing that since the Common Fringed Gentian is biennial, the dry summer of 2016 caused fewer flowers this year. I would be interested to hear other hypotheses too! The attached photos were taken at the Etna Fringed Gentian Area in 2016.

Thanks!

Julia Miller

Ithaca, N.Y.

email of 4 Sept. 2017



Left:
Mesic soil with *Ratibida pinnata* and *Monarda fistulosa*.

Right:
Wet-mesic soil with
Rudbeckia subtomentosa
(background)
and Japanese Stilt Grass
(foreground).

[Photos by the author]



WILD GARDENING

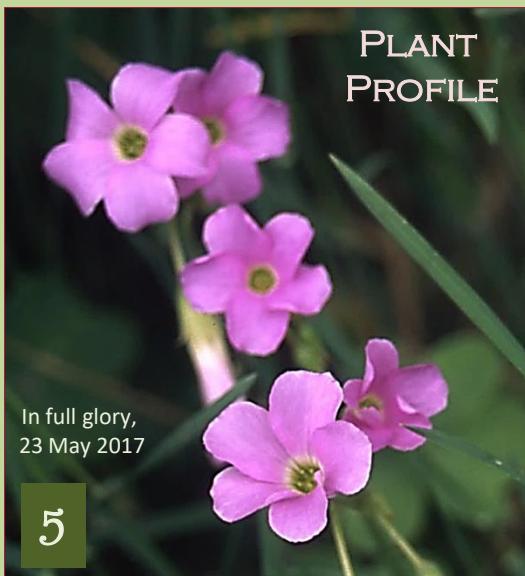
Defeating Japanese Stilt Grass with Aggressive Natives

by Harold W. Gardner

Previously [Solidago 17(4), December 2016, page 8], it was asserted that aggressive natives might be used to overwhelm Japanese Stilt Grass (*Microstegium vimineum*) in full sun — that is, in a prairie or meadow setting. In my opinion, the key is aggressive natives that are about three feet tall, and bloom about the same time as Japanese Stilt Grass in late July or early August. In mesic soil, Gray-headed or Yellow Coneflower (*Ratibida pinnata*) and Wild Bergamont (*Monarda fistulosa*) are very effective. The illustration (below left) shows the result of the third year of a planting over Stilt Grass. In wet-mesic soil, Sweet Black-eyed Susan (*Rudbeckia subtomentosa*) was very effective after three years. The illustration (below right) shows Japanese Stilt Grass with *Rudbeckia subtomentosa* in the background. This was the only spot that was not yet filled in by the native, but an adjacent area of about 100 × 300 yards was completely covered by *R. subtomentosa* and devoid of Stilt Grass.

It has been noted that conservative species are not very effective in forcing out Japanese Stilt Grass. Usually, the conservatives do not have the shading and density necessary to do the job. On the other hand, dense stands of Big Bluestem grass (*Andropogon gerardi*) do not seem to be susceptible to Stilt Grass.





Glimpses of a Rare Native: Violet Wood Sorrel (*Oxalis violacea*) in the Finger Lakes Region

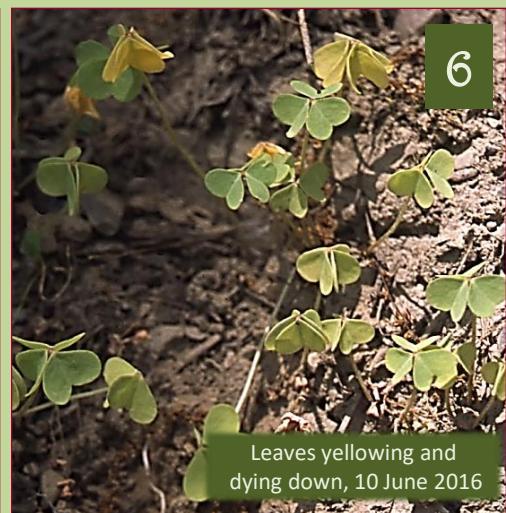
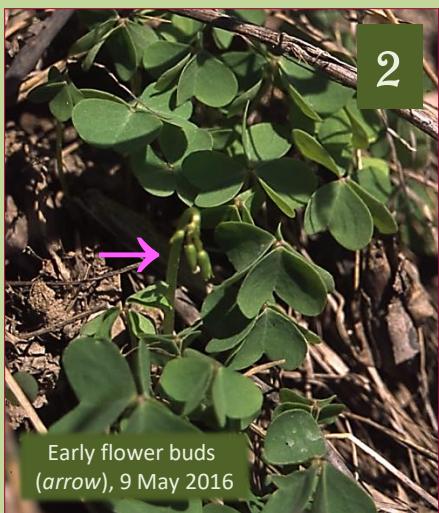
by Robert Dirig

This is a plant most of us know only from field guides! They grow from a bulbous base, producing large masses of leaves in the spring (1, 2, 4) and large magenta flowers on tall stalks in May (2-5). The leaves yellow and die down in June (6). Masses of leaves can cover several square yards, but the flowers, which grow in loose umbels on 6- to 9-inch-tall stems (5), are harder to see. These were found at the edge of an oak woods on limy soil in Schuyler County, N.Y., and watched for three years before I saw abundant blooms. This lovely wildflower is threatened in N.Y., where it is also known from Chemung, Tioga, Broome, and Cattaraugus Counties, as well as in the Hudson River corridor and on Long Island.



F. Schuyler
Mathews, in
*Field Book of
American
Wild Flowers,*
New Edition,
*Revised and
Enlarged,*
1927, p. 234:
"Violet Wood
Sorrel..."

Another most
dainty wood-
land species,
common in
the South....
The flowers
are variable,
sometimes
white, but
generally
light magen-
ta...; they are
never violet....
Rocky ground
and thin
woods...."



LOCAL FLORA

Two Common and Under-collected Bryums

by Norm Trigoboff

In New York State, *Bryum dichotomum* Hedw. (1) and *Bryum rubens* Mitt. (2) are common and distinctive mosses. They are seldom collected here because they are in a group that can be difficult to identify to species, they hardly ever fruit (collectors prefer plants with capsules), and they live around humans (collectors prefer natural areas).

Bryum dichotomum, the more common and abundant of the two, likes sidewalk cracks and high-traffic or frequently disturbed areas of suburban lawns. Its compact, flat-topped clumps of tightly packed plants have a sheen that changes as you walk past — or tilt a clump in your hand. A 10× lens reveals axillary bulbils, concave terminal leaves (which probably promote the sheen), and percurrent costas (3). The clumps may be deep, or as deep as a sidewalk crack allows. The plants may be as small as *B. argenteum*, or more often as large as *B. caespiticium* and *B. crebernum*, two weeds that lack the sheen and bulbils, and have flatter terminal leaves.

Bryum rubens likes half-bare patches of lawn that look more like they were hit by a one-time disturbance than constantly disturbed. Also try gardens, old fields, and active crop fields. I've seen it only once on concrete. The clumps lack a sheen, and are more loosely packed than *B. dichotomum*. In other words, the spaces between the plants are larger — this is seen best after a rain. The leaf axils and below-ground rhizoids usually have minute, ball-shaped tubers. These are often quite abundant, at least somewhere in most clumps. They vary from white when young, through yellow and light red, to dark red when mature. The "balls" are rarely much above ground level. The best way to spot them is to rip a clump of a likely candidate in half and search along the rip line with a hand lens. Look at and just below ground level.

Please see these websites for images of the species:

Plants of the Gila Wilderness-- Gemmabryum dichotomum
BLWG Verspreidingsatlas | *Bryum rubens* - Braamknikmos

I thank Bill Buck and John Spence for help with identifications and writing.

NOTES

(1) AKA *Bryum bicolor* Dicks.. *Gemmabryum bicolor* (Dicks.) J. R. Spence, *Gemmabryum dichotomum* (Hedw.) J. R. Spence.

(2) AKA *Rosulabryum rubens* (Mitt.) J. R. Spence.

(3) Having a midrib that extends to the apex.



Finger Lakes Native Plant Society Autumn Calendar

FLNPS Programs

Saturday — October 14th (rain date October 15th). Our **Annual Seed-collecting Walk**, led by **Krissy Boys**, is dependent on weather and seed availability. Seeds are used for the FLNPS December seed exchange and plant sale, and for the Cornell Botanic Gardens' Wildflower Garden. Please register at info@flnps.org to receive details and updates about this walk.

Wednesday — October 18th — 7:00 p.m. A talk on *The American Chestnut Tree: Its History, Devastation, and Restoration*, by Allen Nichols. **Unitarian Church Annex, 208 E. Buffalo St., Ithaca, N.Y., second floor (enter on Buffalo St.; an elevator is available)**.

Wednesday — November 15th — 7:00 p.m. A talk on *Bird Fruits for All Seasons: Why Good Food Goes Uneaten*, by Mark Whitmer. **Unitarian Church Annex**.

Wednesday — December 13th — 7:00 p.m. Annual *Solstice Celebration [ONE WEEK EARLY]*, **Unitarian Church Annex**.

Wednesday — January 17th — 7:00 p.m. Annual *Member's Night*. **Unitarian Church Annex**.

Additional Regional Programs

Thursday — October 12th — 7:30 p.m. Cornell University Botanic Gardens Fall Lecture Series (Audrey O'Connor Lecture), on *Plants, Magic, and Molecules: The Search for New Cures from Old Remedies*, by Cassandra Quave, Emory University School of Medicine. **Cornell Campus, Gates Hall G01**.

Monday — October 23rd — 7:30 p.m. Cornell University Botanic Gardens Fall Lecture Series, on *Park Rx America: Prescribing Parks to Prevent and Treat Chronic Disease*, by Robert Zarr, Parks Rx America. **Cornell Campus - Statler Auditorium**.

Wednesday — November 8th — 7:30 p.m. Cornell University Botanic Gardens Fall Lecture Series (Class of 1945 Lecture) on *Adapt and Thrive: Creatively Living in a Climate Changed World*, by Alizé Carrère, National Geographic. **Cornell Campus - Statler Auditorium**.



We would love to hear suggestions for speakers or topics, walks, and rambles.

Please watch our website (www.flnps.org) for details and updates about upcoming activities.

**PLANT
PROFILE**

An Unexpected Find

by Arieh Tal

This fall, the Finger Lakes Native Plant Society offered a field workshop on goldenrods (*Solidago* and *Euthamia* spp.) in two separate sessions. Buttermilk Falls State Park, south of Ithaca, seemed an ideal setting for the workshop, in part because of its diversity of habitats, including dry woodlands, successional fields, roadsides, rich swamps, and fens. Twelve of the sixteen goldenrod species present in Tompkins County, N.Y., can be found in Buttermilk Park, and in relatively close proximity.

During the 2½-hour workshop, participants were introduced to the diversity of the twelve species located in five different sites. The last site visited was a small, rich fen tucked away in a quiet niche near Lake Treman — in this case, home to the Rough-leaved Goldenrod (*Solidago patula*), a wetland species.

On the way back to the parking lot, we crossed a lovely, dry, open-wooded hilltop that featured five goldenrod species typically found in such a habitat. Participants in the first session were able to notice only four of those species, however. The fifth species was still in bud at the time, its flowers not fully identifiable. It was masquerading as a Silverrod (*Solidago bicolor*), one of its immediate neighbors of similar height and form, found there in abundance.

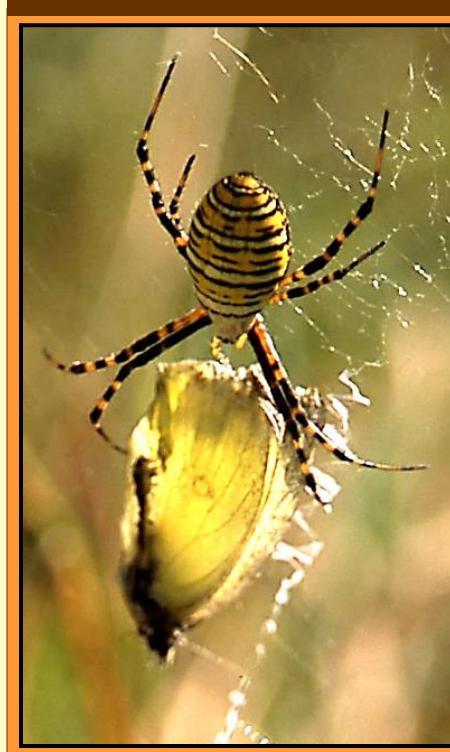
But, during the second workshop session, held two weeks later, that solitary, unique plant was in full flower, distinguished by its yellow flowers, amid all its white-flowered neighbors. "That's a rare, yellow-flowered variety of *Solidago bicolor*!" I declared. "We're fortunate to have discovered it."

After photographing the plant, one of the participants remarked, "Its bracts are recurved." I was briefly startled, but then quickly realized that we were looking at something different altogether. I knew what that plant could only be, and checked the flower heads to confirm. Yes, they were larger than the heads of *Solidago bicolor*, and had larger and more numerous rays. It was *Solidago squarrosa* (Stout Goldenrod), a rather uncommon species found in such dry, open-wooded sites. Before leaving, I noted that the leaves of *Solidago squarrosa* are "basally oriented" (largest toward the base of the plant, and becoming much smaller upward along the stem; and its flower heads are arranged on short branches in a compact ("club-shaped") inflorescence at the top of the stem (see photo, upper right).

At not much more than two feet in height, that particular specimen was anything but stout. The species is called Stout Goldenrod because when it grows in full sun and moist soil, it can reach a height of five feet or more and have a thick stem. ☺



Stout Goldenrod (*Solidago squarrosa*) at Buttermilk Falls State Park [photo by the author]



A Beautiful Butterfly Predator

A Banded Garden Spider (*Argiope trifasciata*) with a Clouded Sulphur (*Colias philodice*) in her web, in a marsh near Watkins Glen, Schuyler County, N.Y., 11 Sept. 2015.

