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

Solidago

Newsletter of the Finger Lakes Native Plant Society

Volume 15, No. 2 ☙❧ June 2014

EDITORIAL
by Robert Dirig

FLNPS Receives

THE RICHARD B. FISCHER
ENVIRONMENTAL CONSERVATION AWARD
2013

Of the Town of Ithaca

PRESENTED TO:

Finger Lakes Native Plant Society

In honor of their active and continuing contribution to the improvement of the Town's natural environment by preserving, propagating and making native plants available to the public. We especially laud their ongoing work weeding out invasive stilt-grass from Six Mile Creek, their annual plant sale, and their educating citizens in the use and appreciation of native flora and the habitats that depend on them.

Given this 4th day of May 2014

Herbert J. Engman, Supervisor, Town of Ithaca, New York

Ellie Stewart, Chair, Town of Ithaca Conservation Board

Richard B. Fischer was Professor of Environmental Education at Cornell University, a renowned teacher, and dedicated local environmentalist.

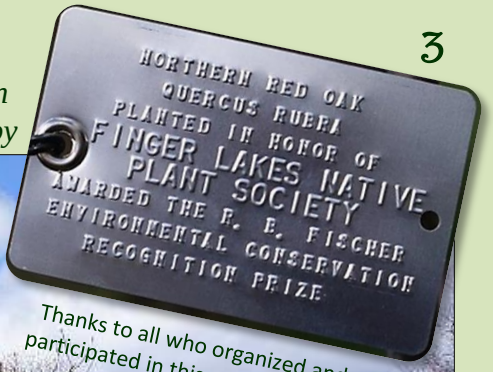
Left to right: **Susanne Lorbeer**, **Anna Stalter**, **Rosemarie Parker**, & **David Keifer**, holding our certificate and plaque, with our tree in the background.

In a letter to FLNPS President **Anna Stalter**, **Ellie Stewart**, Chair of the Town of Ithaca Conservation Board, wrote: *"It is my great pleasure to inform you that the Finger Lakes Native Plant Society has won the Town of Ithaca's 2013 annual conservation award. The Richard B. Fischer Conservation Award is our town's way of recognizing those who have actively contributed to the improvement of our natural environment…. We would like to celebrate your award with a party where we plant a commemorative tree in honor of the FLNPS. We do this every year … in an Ithaca Town Park. We look forward to fixing a date … for a party around the planting of this tree."* See **http://www.town.ithaca.ny.us/richard-fischer-award** for more information about this annual event — and the photo-story on page 2 →

Planting Our Red Oak Tree, May 4, 2014

You can see our "commemorative tree" along Ithaca's South Hill Recreation Way, 250 yards east of the Juniper Drive trailhead. The tree was provided by White Oak Nursery of Canandaigua, N. Y.

1 ~ FLNPS Steering Committee members and friends gather to help plant our tree. **2** ~ Fenced, tagged, and ready to grow! **3** ~ The tag. **4** ~ **James Hamilton**, Vice-Chair of the Conservation Board, points to our listing on their plaque. **5** ~ **Herb Engman**, Ithaca Town Supervisor, presents our certificate to **Anna Stalter**, FLNPS President.



Thanks to all who organized and participated in this exciting event!

Left to right: FLNPS Steering Committee members **Charlotte Acharya**, **Susanne Lorbeer**, **David Keifer**, **Anna Stalter** (holding our certificate), **Rosemarie Parker**, and **Robert Dirig**, with **Herb Engman** (in the red jacket) at the presentation ceremony.

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Newsletter of the
Finger Lakes Native Plant Society

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Published quarterly at Ithaca, New York, USA.

To receive a colored version when *Solidago* is published, please ask Rosemarie Parker 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

Please send *Solidago* contributions & correspondence to Robert Dirig, Editor, at *red2@cornell.edu*.

Deadline for the September 2014 issue is August 15th!

Please Contribute to *Solidago*

WE WELCOME CONTRIBUTIONS THAT FEATURE WILD PLANTS OF THE FINGER LAKES REGION OF N.Y. 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), CHARISMATIC PLANTS (stories about formative early encounters with flora), REVIEWS (of books, talks, 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* 15(1), page 5] was of **Flowering Dogwood (*Cornus florida*)**. The four large, white, petal-like structures on this plant are actually not petals, but modified leaves that look like petals. We call them *petaloid bracts*. Therefore, what appears like one large flower is really four petaloid bracts subtending a cluster of numerous small flowers. Take a look next time you happen by one of these beauties.

Colleen Wolpert wrote, "I was delighted to see the recent newsletter's mystery plant — FLOWERING DOGWOOD (*C. florida*). I have discovered a few in my neighborhood, and look forward to seeing them each spring. I watch for SPRING AZURE (*Celastrina* sp.) butterflies to deposit their eggs, but I have yet to find a caterpillar eating its buds. I can't imagine they eat much.

"I do hope to have a DOGWOOD THYATIRID (*Euthyatira pudens*) moth visit this spring, and I will watch the undersides of the leaf surfaces for its caterpillars. I might have missed the caterpillars in the past, as they reportedly hide in shelters at times. It is a narrow window of time to find them, after flowering, and while the leaves are still young. It is a busy time of year then, but I plan to be more diligent this time around. I also now know how to tell the difference between these and the less desirable sawfly larvae that I have found on my other dogwoods.

"Thanks for continuing to challenge us with your mysteries! I really liked this one, especially since I knew it!"

Thanks to all who entered the contest, and congratulations to contest winners: **Betsy Darlington**, **Harold Gardner**, **Ken Hull**, **Adam Kneis**, **Susanne Lorbeer**, **Bill Plummer**, **Val Ross**, **Dorothy Stiefel**, and **Colleen Wolpert**.

THIS ISSUE'S MYSTERY PLANT is shown above. Hints and suggestions are often provided to contest participants who try. More than one guess is allowed. Common and/or scientific names are acceptable. Please submit your answers to

David Werier (*Nakita@lightlink.com*).

The photo was taken by David Werier on 20 May 2014 in Tompkins Co., N. Y.

FLNPS ANNOUNCEMENTS

Be Thinking Ahead!

By Rick Lightbody

Our annual **Solstice Celebration** in December has, for quite a few years now, included a ***members' photo show***. This year we thought we'd try something different. Since the Solstice party has lots of other fun activities, we'll leave those as is; but we'll move the sharing of photos to another evening, probably in January. And instead of being only for photographers, the new event will be a showplace for anyone with an interesting bit of plant-related art or craft to share. Do you like to take photos, paint, draw, write poetry (or read the poems of others), do needlepoint, sing and play music, tell stories, or do anything else you think others might enjoy? If so, you could do these things as an expression of your love of native plants, and present them at the members' show. We're telling you about this opportunity now, because the growing season is upon us, and over the next half year or so, there'll be plenty to inspire your creativity. So get out there, enjoy our region's beautiful native plants, and start thinking about what ***you*** could share with us in January 2015! We'll provide more details about this exciting new event in the coming months.

CHARLOTTE ACHARYA is leaving Ithaca, and thus the FLNPS. She has been a member of FLNPS since 1998, and has served on our **Steering Committee** for seven years as Publicity Chair and reliable table staffer. She and her family will be moving back to California. Many thanks for her continuing contributions to the FLNPS, her enthusiasm, and the willingness of her family to help populate FLNPS events (like marching in the Festival Parade).

- **WE SEEK NEW MEMBERS OF THE STEERING COMMITTEE** to help run the organization. Committee meetings are roughly every other month from September to May, and everyone is welcome to attend, to see if you would want to commit. Next year all SC meetings will be listed on the website.

- **WE ESPECIALLY NEED A MEMBERSHIP COORDINATOR**, who will maintain the membership database, welcome new members, and send information about FLNPS to non-members who come to walks and talks. Although mailings will not be part of this task, generation of the mailing lists might be.

- **WE ALSO NEED A PUBLICITY COORDINATOR** to e-mail notices of walks, talks, and other events to news outlets, and post them on list-serves. This is a fairly narrow task — not time-consuming, and does not require Steering Committee membership. Awareness of the day of the month is the primary qualification.

Miscellaneous

Common Butterwort (*Pinguicula vulgaris*)

This rare native Finger Lakes plant was photographed fifty years ago, on 10 June 1964, by LaVerne L. Pechuman, in a gorge at Ithaca, N.Y. It grows on dripping, calcareous, mostly shaded cliffs in deep ravines, and is known from three sites in our region. It sometimes occurs with Yellow Mountain Saxifrage (*Saxifraga aizoides*) and Bird's-eye Primrose (*Primula mistassinica*). All three plants reach their southern limit with us, and now have a Threatened status in New York.

Thank You!

Many thanks to all who have contributed to this issue of *Solidago*: **Writers** David Werier, Rick Lightbody, Rosemarie Parker, Catherine Landis, Linda Blossom, Colleen Wolpert, Gin Mistry, & Dawn Dybowski offered material that made this issue special. **Calendar items** and **announcements** were organized by Rosemarie & Anna Stalter. **Illustrations** were loaned by Mike Smith (pp. 1 (*people*) & 2 *(#1, 3, 5*), David Werier [pp. 4, 7 (*top*), & 8 (*2 plants*)]; LaVerne L. Pechuman (p. 5); Catherine Landis [pp. 7 (*bottom*) & 8 (*map, heron*)]; Natalie Cleavitt (9); and Robert Dirig [pp.1 (*plaque*), 2 (*#2 & 4*), 4 (*portrait*), & 10-12]. The image of R. B. Fischer (p. 1) is from a memorial statement in 2005. **Special thanks** to Rosemarie for on-the-spot prose and other assistance, to David for loaning photographs on short notice, to Anna for details on our Fischer award, and to Scott LaGreca for the Emerson quote. **Layout & design** by the Editor; **review of copy** by Rosemarie, Anna, David, Scott, John Freudenstein, Carolyn Klass, Angie Macias, & Thelma Turner; **printing** by Gnomon Copy, Ithaca, N. Y.; and **mailing** by Rosemarie & Susanne Lorbeer. ***Best wishes to FLNPS members (and all others in our reading audience) for an enjoyable summer of exciting interactions with beautiful wild plants and their associated animals in a variety of fascinating habitats!***

— Robert Dirig

Native Plant Garden in the City of Ithaca

by Rosemarie Parker

Do you wish you had more sun or better soil for a real native plant garden? Do you work or live in Ithaca? If so, I have a great garden for you! FLNPS members installed a native plant demonstration garden outside the downtown office of the Finger Lakes Land Trust about 10 years ago. It is on a busy corner (Tioga & Court Streets), and seen by numerous drivers and pedestrians. It is also appreciated by many, who stop by to thank gardeners during visits.

This garden needs a new "head gardener," or at least a regular helper. Last year Laura Martin cleaned out most of the overly-exuberant plants, so the garden is in good shape. I just did a spring clean-up, and I think there is opportunity to plant some new species in there this year. If you can take over this garden (best), wander by every few weeks and see if it needs sprucing up (second best), or even just help with fall clean-up this year, please let me know at ***info@flnps.org*** [redacted] I can commit to clean-up help and any consulting requested, but I am trying to turn over the main responsibility, as I am simply not in the vicinity enough to see how it is doing and if it needs minor work.

Letters

Dear Bob,

You do such an excellent job on the newsletter, thank you. I look forward to each one, and especially appreciate the emphasis on insect-plant encounters.

Catherine Landis
SUNY ESF, Syracuse, N.Y., email of 10 May 2014

I wanted to tell you what a beautiful issue of the newsletter this last one was — color does make a difference and the articles were informative also. Good enough to keep me at the computer, which I try to get away from.

Linda Blossom
email to FLNPS website, 5 March 2014

Hello,

They just get better and better. What a delight! Everyone's contribution [to *Solidago* 15(1), March 2014] was wonderful. Of course, I am partial to the parts related to butterflies, but just loved all of it. Thank you for your continued efforts to make this such a great read!

Colleen Wolpert
Apalachin, N.Y., 8 March 2014

"The earth laughs in flowers." — Ralph Waldo Emerson

Ithaca Native Landscape Symposium

Summarized by Gin Mistry

ON MARCH 7TH AND 8TH, 2014, I ATTENDED THE ANNUAL NATIVE LANDSCAPE SYMPOSIUM, which was organized by DAN SEGAL of the Plantsmen Nursery and RICK MANNING, landscape architect. The two days of presentations were held at CINEMAPOLIS in downtown Ithaca. This event, of interest to gardeners, landscape architects, and native plant enthusiasts, was, as usual, packed with interesting and informative presentations.

Dan Segal opened the program with wonderful slides of native plants, recommending plants which are well suited to our area's gardens. Some of the plants suggested were :

Shrubs ~ Spicebush (*Lindera benzoin*), Gray Dogwood (*Cornus racemosa*), and Pussy Willow (*Salix discolor*).

Perennials ~ Skunk Cabbage (*Symplocarpus foetidus*), Golden Ragwort (*Packera aurea*), and several varieties of goldenrod (*Solidago* spp.). I enjoyed his comment on the care of perennials: "Dead-heading takes food out of the mouths of birds."

Grasses ~ Northern Sea Oats (*Chasmanthium latifolium*).

Trees ~ Hickories (*Carya* spp.) provide food for wildlife, and Tuliptree (*Liriodendron tulipifera*) is a fast-growing tree.

Ferns ~ Cinnamon Fern (*Osmunda cinnamomea*) and Ostrich Fern (*Matteuccia struthiopteris*) are old favorites in the garden.

Vines ~ our common native Virginia Creeper (*Parthenocissus quinquefolia*) is beautiful all seasons of the year.

Darrel Morrison, Landscape Designer, gave two talks during the symposium, with ample time for questions and discussion. He showed slides of several of his projects, from design to completion. He emphasized matching plants to the environment, and using locally sourced plants, and stressed using communities of plants which occur together in nature.

I loved his slides of the University of Wisconsin Arboretum, where he planted great drifts of prairie plants in "river-like relays."

Robert Grese, from the University of Michigan, also gave two talks. His first presentation was a summary of the history of the native landscaping movement in the United States. He mentioned JENS JENSEN, who emigrated from Denmark in 1884, and influenced the plantings in Chicago's public parks; and HENRY COWLES, the "father of ecology." In 1929 the book *American Plants for American Gardens* by Rehman and Roberts was published. This was, and still is, a classic in native plant landscaping. (This book was reviewed by Bill Plummer in the December 2013 issue of *Solidago*.)

Mr. Grese described his own recently published book, *The Native Landscape Reader*, which is a comprehensive history of the native landscaping movement.

Tom Whitlow from Cornell described a project at Montezuma Wetlands where an inland salt marsh was created: The rare plants which thrive in such a place were introduced after preparing the site.

Mark Whitmore (also at Cornell) had some good news and some bad news about two non-native pests. The HEMLOCK WOOLLY ADELGID (*Adelges tsugae*), which is decimating the Eastern Hemlock (*Tsuga canadensis*) forests, can kill a Hemlock tree in 4-10 years. (I have been very discouraged as I monitor this insect at the Ellis Hollow Preserve in Ithaca.) The good news is that there is a non-native beetle (*Laricobius* sp.) that eats *only* (we hope!) the adelgid, and it is being released to help control the pest.

He also mentioned the EMERALD ASH BORER (*Agrilus planipennis*), and the insecticides which are effective in controlling this insect.

SEVERAL INTERESTING AND INSPIRING SMALL PROJECTS WERE DESCRIBED BY CONFERENCE ATTENDEES:

Kiren Gabrielson described a woodland garden she designed and built at SUNY-Orange in Newburgh, N.Y. She was able to solicit help from many community organizations and volunteers for this project. Her finished garden looked lovely.

Kathy Wolf related her work in restoring native plants to the heavily used areas of Niagara Falls State Park. This ongoing project involves clearing large areas of non-native plants, and bringing in loads of soil and huge boulders to line the walkways. The new plantings on Three Sisters Islands are beautiful.

Jim Engel, owner of White Oak Nursery, showed how he restored native plants at Lagoon Park in Canandaigua, N.Y. He mentioned that when he removed all the non-native species, many people were initially upset at the change. He planted over 300 native trees and shrubs. He felt one needs to persuade and educate the public about the value of native plants.

The first day ended with **Rick Manning**'s update of the Cayuga Waterfront Trail in Ithaca. He showed beautiful slides of the wildflower gardens along the trail.

MY FAVORITE PRESENTATIONS AT THE SYMPOSIUM WERE THE TWO TALKS ON POLLINATORS.

Heather Connelly, a graduate student at Cornell, spoke of the need to encourage our many species of wild native bees, which are more efficient at pollinating than the non-native Honey Bees (*Apis mellifera*). She described bees' life cycles and nesting habits. She also listed the many challenges our native bees face, including the use of pesticides and the loss of habitat. Of interest was her case study: Native wildflowers were planted along the edges of strawberry fields. The presence of wildflowers increased the number and diversity of pollinators visiting the fields.

Janet Allen followed with a talk "On the Wings of Pollinators." [Ms. Allen's presentation on the Monarch Butterfly (*Danaus plexippus*) at last year's symposium was wonderful!] Ms. Allen described the process of pollination, and noted that three-quarters of the world's plants require pollinators: butterflies, birds, mammals, and most important — bees. (There are 4,000 species of bees in the United States.) As the non-native Honey Bees so widely used in agriculture have been threatened recently by Colony Collapse Disorder, the FDA has stated "this is the biggest general threat to our food supply." Native bees could fill the gap, but they too are threatened by pesticides and habitat loss. She included the problem of "bee paranoia," which impels people unwittingly to destroy bees. She encouraged the audience to provide habitat for native bees, and to plant bee-friendly plants such as penstemons, milkweeds, asters, and goldenrods.

These two presenters complemented each other perfectly, and brought the subject of pollinators to the fore, with important information and beautiful slides.

The last presentation of the symposium was a description by **Tim Noon** (of the U.S. Forest Service) of a controlled burn at the Finger Lakes National Forest in Hector, N.Y. He stated that fire is useful in slowing succession, reducing woody fuels, and promoting healthy grasslands. His slides of the burn were fun to watch.

The two-day symposium was, as usual, well organized and packed with information.

LOCAL FLORA

Reclaiming an Industrial Landscape: Onondaga Lake Bioblitz, September 12-13, 2014

by Catherine Landis

During the past 200 years, Onondaga Lake has served as a sink for just about any kind of industrial or domestic waste you can think of, from mercury and sewage to tars, naphthalene, and broken china (from the old Syracuse China factory). Remarkably, the use of water bodies as waste sinks was once deemed a perfectly valid use of a natural resource (Tarr 1996, Keeling 2005). Onondaga Lake became that sink, the sacrificial area on the northeastern edge of the Finger Lakes. By 1950, 139 industries discharged their wastes into Onondaga Lake, with Solvay Process the largest contributor (Ferrante 2005).

Not only were wastes flushed directly into Onondaga's waters, but the surrounding wetlands were intentionally filled in with trash and, starting in the late 1800s, Solvay's waste. JOHN GOLDIE, a Scottish botanist, visited Salina in 1819, and described the trash around the salt marshes near the eastern shore of the lake:

[F]or the space of two or 3 acres it looked like a spot that had been covered with water during winter but now nearly dry and covered with all manner of rubbish and filth, sending forth a most disagreeable odor. The furnaces for drying the salt are in and around the spot (Goldie 1897).

Salt making was Onondaga Lake's first industry. It was followed by many other manufactories, including the famed Solvay Process plant (started 1881), run by a company later known as Allied Chemical. This plant produced soda ash from limestone and salt. For every pound of soda ash, a pound and a half of waste was produced. Much of this waste (at 500 tons or more each day) went into the Lake or, when that practice was deemed harmful to the fishery, into lakeshore wetlands.

But Onondaga Lake was not always a dump. Long before Euro-Americans arrived, Haudenosaunee people traveled through its waters and camped on its shores. They fished for eel and salmon, and gathered berries, medicines, and greens (such as *Salicornia*) from the surrounding wetlands. Moreover, on the banks of this lake, the Peacemaker helped create the Haudenosaunee Confederacy, or Five Nations (later to become Six Nations when the Tuscaroras joined). The Great Law of Peace, the founding constitution of the Confederacy, was forged at the same time. Onondaga Lake today remains a place of great cultural significance to the Haudenosaunee.

GLASSWORT or SALTWORT (*Salicornia depressa*, right), photo by David Werier, Suffolk Co., N.Y., 4 Aug. 2007.

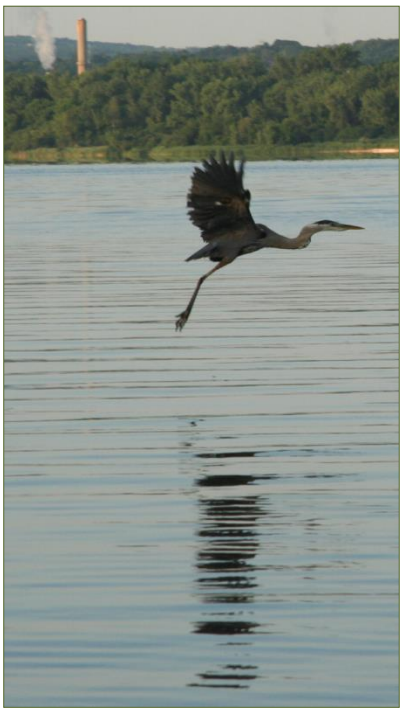
ONONDAGA LAKE (below), photo by Catherine Landis.

Above: **ONONDAGA LAKE**, showing historical salt springs and other wetland vegetation (American Philosophical Society, ca. 1800).

Left: **SEASIDE CROWFOOT** (*Ranunculus cymbalaria*), photo by David Werier, Washington Co., Maine, 20 July 2011.

Bottom Left: **FRESH WATER CORDGRASS** (*Spartina pectinata*), photo by David Werier, Wayne Co., N.Y., 13 July 2004.

Below: A **GREAT BLUE HERON** flies over Onondaga Lake, photo by Catherine Landis.



Onondaga Lake also has a history of botanical richness. The diverse hydrogeochemical settings around the Lake supported a unique flora that attracted early botanists such as GOLDIE, mentioned above. JOHN BARTRAM (1743), PETER KALM (1750), and FREDERICK PURSH (1807) also visited the lake. Unfortunately, except for Pursh, little remains of their collections or notes specific to Onondaga. Kalm described the PASSENGER PIGEONS (*Ectopistes migratorius*) flocking by the hundreds to the salt springs. Bartram noted the extensive marginal wetlands, and collected SEASIDE ARROWGRASS (*Triglochin maritima*). John Goldie kept a journal, but his botanical notes were lost to fire.

PURSH COLLECTED A NUMBER OF PLANTS DURING HIS VISIT TO CENTRAL NEW YORK IN JULY AND AUGUST OF 1807. He found the HART'S TONGUE FERN [*Asplenium scolopendrium*, var. *americanum* — see photos in *Solidago* 14(1), page 4] at Split Rock. He also made several visits to the Onondaga Lake salt springs, where he collected SLENDER BOG ARROWGRASS (*Triglochin palustris*), SEASIDE ARROWGRASS, FRESHWATER CORDGRASS (*Spartina*

pectinata), and SEASIDE CROWFOOT (*Ranunculus cymbalaria*). Pursh also reported finding "Samphire," now called GLASSWORT or SALTWORT (*Salicornia depressa*), in the most saline parts of the marsh.

He found notable freshwater plants as well. In fact, before the salt industry took off at Onondaga Lake, salt marshes were fairly localized around salt springs. Much of the area around the lake was forested, and fed by potable springs. NORTHERN WHITE CEDAR (*Thuja occidentalis*) swamps and ASH-MAPLE (*Fraxinus-Acer*) swamps were the prominent wetland types, while herbaceous wetlands extended into the lake's shallow margins. But during the 19th century, trees in the swamps were cut "without any regard for economy" or regeneration (according to DeWitt Clinton, then a state senator, in 1810). They became fuel for boiling brine to make Onondaga salt.

In 1807, Pursh recorded COMMON BUTTONBUSH (*Cephalanthus occidentalis*), ROYAL FERN (*Osmunda regalis*), KALM'S LOBELIA (*Lobelia kalmii*), and SWAMP ROSE (*Rosa palustris*) at Onondaga Lake. He also noted plants of cultural significance, such as KENTUCKY COFFEE TREE (*Gymnocladus dioicus*), AMERICAN GROUNDNUT (*Apios americana*), and, at Three Rivers, PAWPAW (*Asimina triloba*). He collected EASTERN WILD RICE (*Zizania aquatica*) from the Seneca River, where he reported it abundant.

THE STORY OF ONONDAGA LAKE HAS ALWAYS BEEN ONE OF CHANGE, and today is no exception. Allied Chemical closed its soda ash plant in 1985. The lake was declared a Superfund site in 1994, and cleanup efforts have been underway ever since. Atlantic States Legal Foundation and NYS-DEC sued Onondaga County for non-compliance with the Clean Water Act in 1998, leading to upgrades at the lakeside sewage treatment plant. Slowly a healing process seems to be occurring at Onondaga Lake.

TO RECOGNIZE THIS PROCESS, SUNY ESF IS SPONSORING A BIOBLITZ AT ONONDAGA LAKE AND SURROUNDING LANDS ON SEPTEMBER 12-13, 2014. This "SUNY ESF Presidential Inauguration Bioblitz" is part of the installation of new ESF President **QUENTIN WHEELER**. It's time to reclaim the lake's identity as a natural landscape, not just an industrial one, by highlighting the biota living in or around the lake.

We are inviting botanists and plant enthusiasts to find many of the historical species not seen for decades (like *Salicornia*), and perhaps discover species new to central New York. The possibility of such plants remaining extant is not so far-fetched. For example, **DON LEOPOLD** and his students at SUNY ESF have rediscovered a number of salt marsh plants, including FRESH WATER CORDGRASS, BLACK-GRASS RUSH (*Juncus gerardii*), and SEASIDE GOLDENROD (*Solidago sempervirens*) in the Onondaga Lake area.

The Bioblitz begins at 6:00 p.m. Friday, September 12th and ends at 6:00 p.m. on September 13th. For meeting times and locations, please send an email to me at [redacted] as the date approaches, and plans are in place. I hope you can join us!

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SHINGLED ROCK-SHIELD
Xanthoparmelia viriduloumbrina
(formerly known as *X. somloënsis*)
is a common lichen that grows on rocks in the Northeast. The slightly raised brown disks with toothed, inrolled margins are apothecia of the fungal partner.
Illustration by NATALIE CLEAVITT, who wrote "I looked at the FLNPS website a few days ago, and thought of you all *very* fondly." (email, May 20th 2014).

APGAR'S PLANT ANALYSIS

Red Flowers of Summer

Top to bottom: **Pitcherplant** (*Sarracenia purpurea*), in bogs, June; **Canada Lily** (*Lilium canadense*), in fens, July; **Oswego Tea** (*Monarda didyma*), in moist woods, July-Aug.; **Cardinal Flower** (*Lobelia cardinalis*), on shores, July-Aug.

Could You Pass This 1882 Botany Exam?

Contributed by Dawn Dybowski

A friend found an ***Apgar's Plant Anaylsis*** journal (*title from cover, left*) from 1882 at a used book store in the Catskills. I tried to scan some of the entries without success. **May F. Wilcox** of Jefferson County, N.Y., made the observations on April 16th 1882 (her handwriting was beautiful). An 8½ × 4 inch BOTANY exam sheet (*below*) was found in the book. We were entertained by its simplicity and brevity. An online search of the three title lines revealed additional short examinations in various subjects, besides botany. Perhaps these were used for teacher certification programs?

University of the State of New York.

13th Advanced Academic Examination.

BOTANY.

June, 1882—Time two and one-half hours only.

44 credits, necessary to pass, 33.

1. Draw a diagram representing a simple leaf having an *ovate* form, *net-veined*, *feather-veined* venation, *acute* apex, *crenate* margin and *compressed* petiole..... 6
2. Make drawings of the following varieties of inflorescence: *raceme*, *spike*, *umbel* and *corymb*..... 4
3. Describe each of the following forms of the *regular polypetalous* corolla: *rosaceous*, *liliaceous*, *papilionaceous* and *cruciform*..... 4
4. When are the stamens said to be *perigynous?*..... 1
5. Describe each of the following positions of the anther: *innate*, *adnate*, *extrorse*, *introrse*..... 5
6. Name fruits, illustrating the *pome*, *pepo*, *berry*, and *drupe*..... 4
7. Make drawings to illustrate *conical*, *fusiform*, *napiform* and *fibrous* roots..... 4
8. Give the botanical name of three species of Viola found in your county..... 3
9. Give the botanical names of five plants analyzed by yourself..... 5
10. Give the full botanical and common names of five *early* spring flowers found in your neighborhood..... 5
11. Name two plants which are cultivated for making cloth. 2
12. Define botany..... 1
13. How many botanical specimens have you prepared this season?

☞ *Carefully read and obey the following directions:*

☞ Do you now, at the close of this examination, conscientiously declare, that you had no previous knowledge of the questions to be proposed, that you have neither given to any other scholar, nor received from any source, explanations or other aid in answering any of them, and that you have not spent more than the allowed time? If so, write *in the next line after the end of your set of answers*, near the right side of the paper, the words *"I do SO declare,"* and underneath *subscribe your name*

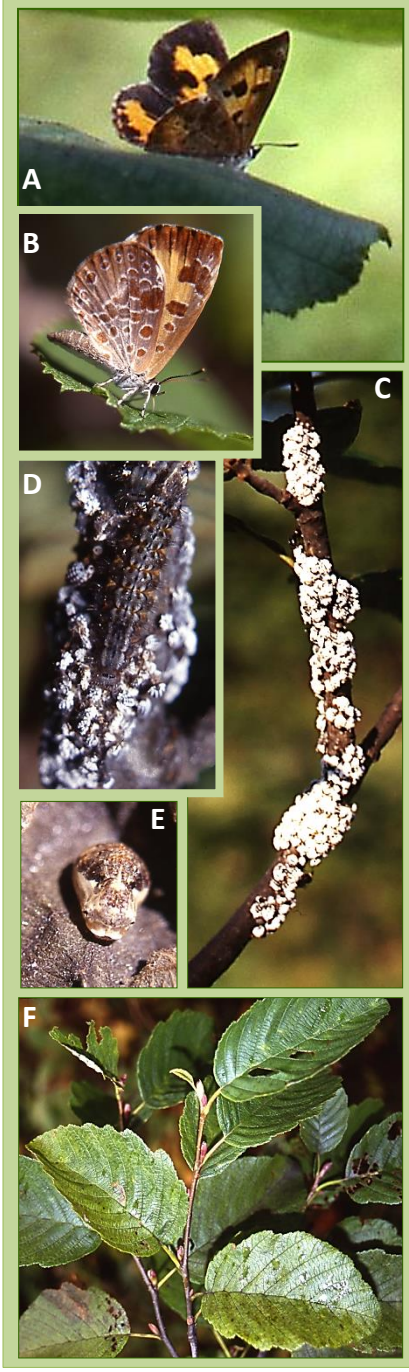
☞ Every set of papers lacking this *full declaration* and *signature*, however satisfactory in other respects, will be rejected, on the presumption that the required declaration could not conscientiously be made.

☞ Fold your MS. in proper form for filing, and endorse the last leaf with the name of the institution, your own name, the subject, and the date of the examination.

The Harvester Butterfly ~

The Finger Lakes' Other Carnivorous Butterfly

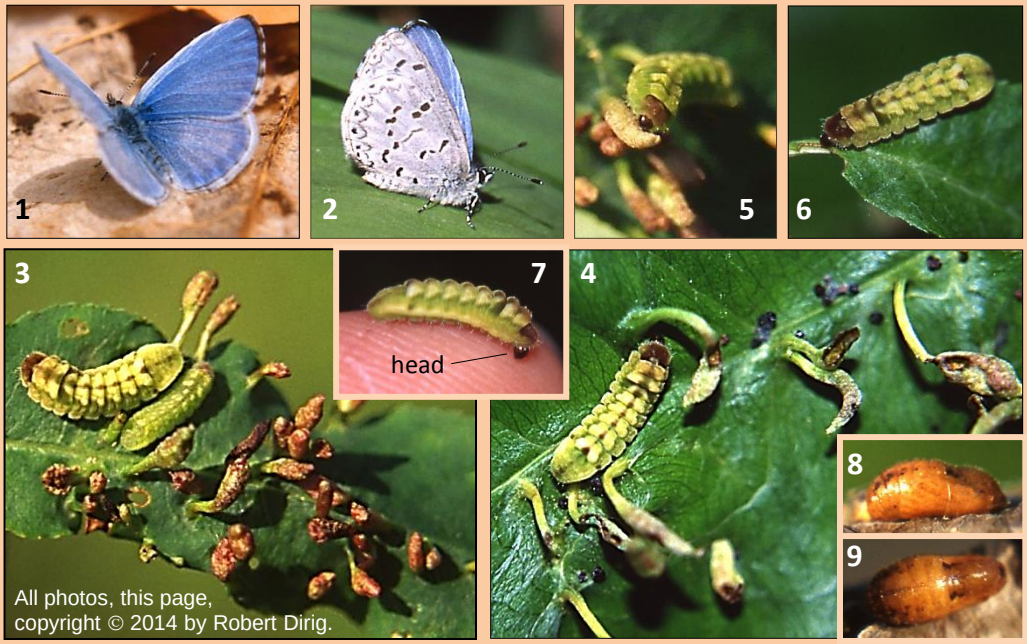
A, perched ♂ (open wings); **B**, ♀ showing wing venters; **C**, Woolly Alder Aphids (*Prociphilus tessellatus*) on Speckled Alder (*Alnus incana rugosa*); **D,** striped larva among aphids; **E**, the odd viper-faced pupa; **F**, Speckled Alder. Photos from the Finger Lakes Region & Adirondacks, 1998.



Beautiful Butterfly Carnivores ~

The Cherry Gall Azure in the Finger Lakes

by Robert Dirig



Photographed at the McLean Bogs Preserve near Dryden, Tompkins County, N.Y.

EVER SINCE LEARNING ABOUT CHERRY GALL AZURES (*Celastrina serotina*, **1-2**), which were formally described as a new species of the North American *Celastrina* complex in 2005*, I've checked for their larvae whenever I have encountered cherry (*Prunus* sp.) leaves that have galls. On June 10th 2011, I noticed a small tree that was covered with gall-infested leaves in a hedgerow, immediately found a larva on a leaf, and put it in a plastic container to take home and study.

These galls are formed by ERIOPHYID MITES (*Phytoptus cerasicrumena*), Eriophyidae. They are most often found on Black Cherry (*Prunus serotina*, **3-5**) and Choke Cherry (*P. virginiana*) leaves. (This Azure's species epithet, *serotina*, refers to its primary association with Black Cherry.) The galls are an odd reddish-green color, which the larvae closely match. The first caterpillar I saw was resting flat on a leaf blade, helping me to see it. Due to their camouflage and the three-dimensional nature of the galls, I collected three other larvae without realizing it, between June 10th and 15th, while gathering gall-covered leaves from the same tree for feeding.

When eating, the caterpillars "stand on their hind legs" (*anal prolegs*), with their mouth at the top of a gall (**5**). Their glossy brownish-black head (*face cap*) is tiny (**5-7**), and the *prothorax* (front segment of thorax) extends as a long "neck." They chew a hole in the gall, then stick their head inside, and eat any mites they can reach, then chew farther down and do it again, until the hollow interior is free of mites. Then they move over and repeat the process on every gall on the leaf (**4**). The fully grown caterpillars were 1 cm long, and I had two pupae on June 19th and 24th — like 8-mm-long varnished knobs of wood (**8-9**). Outdoors, the chrysalids overwinter, producing the resplendent adults in a single brood in late April and May (**1-2**). Larvae should be expected in New York in early June, and pupae by the end of the month. This species and the **HARVESTER** (*Feniseca tarquinius*, left), with its odd larvae feeding mostly on Woolly Alder Aphids, are our only known carnivorous butterflies.

*See Harry Pavulaan's & David Wright's paper "*Celastrina serotina* (Lycaenidae: Polyommatinae): A New Butterfly Species from the Northeastern United States and Eastern Canada" in *The Taxonomic Report* of the International Lepidoptera Survey, Volume 6, Number 6, pp. 1-18, 1 Dec. 2005.

Finger Lakes Native Plant Society

Upcoming FLNPS Workshop

This is our last spring program. Regular talks and walks will resume in September. Please feel free to suggest topics and speakers, or volunteer to give a talk or lead a walk. *Please watch the FLNPS website (**www.flnps.org**) for updates and summaries of upcoming talks and other FLNPS events.*

June 14 (*new date*) — Saturday — 9:00 a.m. **PROPAGATING NATIVE PLANTS, PART 3, CUTTINGS**, by **Pat Currin**. Ken Post (Greenhouse) Classroom, Cornell University Campus, NE corner of Judd Falls and Tower Rds. (42.448945, -76.469092). Sometimes you really want a male, or female, of a dioecious species. Sometimes you just love the character of a particular shrub. Learn how to propagate more of your selected woody plants with rooted cuttings. We will learn about the various methods of rooting cuttings, and start some in the mist-house. If all goes well, you can pick up some rooted cuttings once they are ready. Registration required: *info@flnps.com*.

Explore Your Watershed 2014

A series of walks and talks will be held in the Six Mile Creek Natural Area, sponsored by the Friends of Six Mile Creek and the Natural Areas Commission. Meet in the parking area of the Mulholland Wildflower Preserve off Giles St. in Ithaca, N.Y. Webpage: ***www.sixmilecreek.org***

June 7 — Saturday — 9:00 am. **BIG TREES: Joe McMahon** will lead a walk to see some of the largest and oldest trees in the Six Mile Creek Natural Area. Prepare to be amazed!

July 12 — Saturday — 9:00 am. **WATERSHED WALK: Roxy Johnston**, Ithaca's Watershed Coordinator, will lead a walk along Six Mile Creek, source of the City's water supply, and explain how the current rebuild of this important system is progressing.

Other Area Events

June 26-29 — Thursday to Sunday. **2014 NORTHEAST DRAGONFLY SOCIETY OF THE AMERICAS MEETING**, organized by **Bryan Pfeiffer**. Binghamton, N.Y., area, centered at the Best Western Plus in adjacent Johnson City, N.Y. The meeting will include field days with odonates (and other odonatologists) at **Jam Pond** in Chenango Co., N. Y., and **Wier's Pond** in Susquehanna Co., Pennsylvania. Information: [redacted] [*continued* →]

MAYBE THIS YEAR we will find an **Imperial Moth** (*Eacles imperialis*, right)? Or a **Luna** (*Actias luna*, right column)?

WE WERE VERY PLEASED TO RECEIVE A CERTIFICATE FROM SUSTAINABLE TOMPKINS, citing our evening program on September 18, 2013. In their list of over 400 awards of this kind last year, our entry reads: "***The Finger Lakes Native Plant Society presented a talk by Cornell University professor Tom Whitlow on the challenge of maintaining biodiversity in areas heavily impacted by human activity.***" The award was presented on behalf of Sustainable Tompkins by **SASHA PARIS** at our April 16th 2014 evening program. We greatly appreciate this honor!

July 19-27. NATIONAL MOTH WEEK. Finger Lakes Region residents are encouraged to look for moths attracted to their house lights and camouflaged in their yards. You can contribute species lists or take photographs of the moths and send them in for identification and documentation on the Finger Lakes Moth Week species list. Send lists and photos (with locations) to ***moths@oldbird.org***. A running tally of all species reported during the week will be posted on the website (address below). **Local events** will include blacklighting and sugaring parties from 8:00 p.m. to midnight at **WATKINS GLEN STATE PARK** (Friday, July 25) and **ROBERT H. TREMAN STATE PARK** (Saturday, July 26), weather-permitting (not in heavy rain/lightning). More events will be added. Please check the website at ***http://www.oldbird.org/mothweek/2014FingerLakesMothEvents.html*** for details as the schedule develops.