



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

# Solidago

Newsletter of the  
Finger Lakes Native Plant Society

Volume 27, No. 1

৪০৯

March 2026

## REPORT

# Winter Solstice Celebration, 2025

photos by RP  
except as noted

by Rosemarie Parker

About fifty native plant lovers converged on Cornell Botanic Gardens' Nevin Center the evening of December 16<sup>th</sup> 2025 for the FLNPS annual Winter Solstice Celebration. In great tradition, we had many tables of locally collected seeds for the taking, and people to help with selection if needed.

We had a great assortment of winter twigs and stalks for Robert Wesley to assemble an identification quiz. No one managed to guess them all, but Mary Squyres missed only two, winning the first selection of the door prizes. Prizes donated by members and the Steering Committee included books, a native flower puzzle, free plants, free memberships, and a flower press.

► Gin Mistry *et al.* selecting seeds. There were over 300 different local seed collections of more than 200 species.



▲ Robert Wesley giving answers to the winter plant quiz. Photo by Audrey Bowe.

We feasted on at least 20 dishes containing a plant ingredient that was native, naturalized, or associated with regional indigenous culture, plus some dishes with none of those but just good food. Pawpaws and corn (3 sisters) were popular, along with maple & local honey flavorings. We even had a Ganondagan roasted white corn dish. A simple but wonderful combination of warm biscuits with pawpaw jam hit my sweet spot. *Please see two recipes on pages 6 & 7.* Try them, and start pondering what native plant-inspired dish you might bring next year. We may go back to having a people's choice contest for the food, in which case foraged ingredients get you extra kudos.



▲ Enough food for everyone!

Kim Mills and Lisa Letcher also brought homemade seed cleaning devices, based on the open source design from Real Seeds (<https://www.realseeds.co.uk/seedcleaner.html>). Reports are that separation of seed vs. chaff is good once you figure out the correct air flow for a given species.



◀ Note the slight design variations in the two aspiration seed cleaners.

Thanks to everyone who helped with the entire seed collection process, who helped set up and clean up, who brought food and prizes, and who provided tips and conversation for all. See you next year.



## THE FINGER LAKES NATIVE PLANT SOCIETY STEERING COMMITTEE

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- Rosemarie Parker:** Webmaster, Listserv Coordinator, & Assistant Newsletter Editor
- David Werier:** Newsletter Editor Emeritus



## Please Contribute to *Solidago*

WE WELCOME CONTRIBUTIONS THAT FEATURE WILD PLANTS OF THE FINGER LAKES REGION OF NEW YORK 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 **LOCAL FLORA** (plant lists or details of species from specific 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, and nurseries), **LETTERS** (commentaries and letters to the editor), **ESSAYS** (on botanical themes), **VERSE** (haiku, limericks, 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 and returned). We also can always use **FILLERS** (very short notes, small images, cartoons) for the last few inches of a column.

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Finger Lakes Native Plant Society

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*Published quarterly at Ithaca, New York, USA.*

FLNPS (founded in 1997) is dedicated to the promotion of our native flora. We sponsor talks, walks, and other activities related to conservation of native plants and their habitats. *Solidago* is published as a colorful online version, and a B&W paper version that is mailed. The online format is posted 3 months after publication. Please see [www.flnps.org](http://www.flnps.org) for details of membership, past *Solidago* issues, and updates about our programs.



**Climbing Rose** (*Rosa setigera*) might be a nice addition to a trellis. See the inaugural entry in our new column, **Ask A Native Plant Gardener**, on pp. 11-12. *Photo by Robert Wesley.*

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\* Please send *Solidago* contributions & correspondence to Robert Dirig, Editor, at [editorofsolidago@gmail.com](mailto:editorofsolidago@gmail.com)

**Deadline for the June 2026 issue is May 15<sup>th</sup>!**

## NAME THAT PLANT CONTEST

The photo from last issue's NAME THAT PLANT CONTEST [*Solidago* 26(4), p. 4] was of **Downy Rattlesnake Plantain (*Goodyera pubescens*)**, which is a native orchid that grows in central NY. It has distinctive and showy leaves, these being green with white lightning-like venation. Check them out! The flowers are fun too, although they are small. The opening is somewhat reminiscent of a baby bird with its beak open, waiting for a parent to feed it. Thanks to all who entered the contest, and congratulations to the winners: **Betsy Crispell, Bob Dirig, Joe O'Rourke, Rosemarie Parker, Carolyn Summers, Kass Urban-Mead, and Robert Wesley.**

*This issue's mystery plant is shown below.*



Common and/or scientific names are acceptable, and more than one guess is allowed. Hints and suggestions are often provided to contest participants who try. Please submit your answer to

**David Werier ([Nakita@lightlink.com](mailto:Nakita@lightlink.com))**

The photographs were taken in New York, by David Werier, on June 16, 2004 in Cayuga Co. (background image of plant), June 5, 2021 in Warren Co. (upper left – broad sheathing petiole), and July 1, 2022 in Madison Co. (lower right – flowers; upper right – immature fruit).



### Thank You!

**WE ARE GRATEFUL** for the eclectic mix of subjects and styles in this issue! Thank you to our columnists and other contributors, including **writers** Mimi Lucero (p. 5), Rosemarie Parker (pp. 1-2, 6-7), Norm Trigoboff (pp. 6-10), David Werier (p. 4), Robert Wesley (pp. 11-12), & Robert Dirig (pp. 4 & 10); & **photographers** Audrey Bowe (p. 1), R. Dirig (p. 10), Rosemarie Parker (pp. 1-2), Norm Trigoboff (pp. 8 & 10), David Werier (p. 4), & Robert Wesley (pp. 3 & 11-12).

**Layout & design** by the Editor, **proofreading** by Rosemarie Parker, and **printing** by Gnomon Copy in Ithaca, N.Y. Anna Stalter emailed the newsletter, Pat Curran mailed paper copies, & Rosemarie posted to the web.

Please check our website ([www.flnps.org](http://www.flnps.org)) regularly throughout the coming months for announcements and details of walks, talks, workshops, and other events. Many thanks to our **Steering Committee** (p. 3) and all of our members for supporting FLNPS and its activities. We wish everyone in our reading audience a pleasant rest of winter, in anticipation of the magical spring pageant of flowers to begin soon after!

— Robert Dirig

## REPORT

## Reciprocity and Memory in Landscape Design:

## A Report from the NDAL Conference

by Mimi Lucero, M.S., Kichwa Nation

I often think about the spaces we inhabit — and more importantly, the spaces cultures of care are keen to inhabit. This is how I was taught as a young Kichwa girl growing up in the North Ecuadorian Amazon, in the Antisuyu Territory. Where our old ones chose to set our communities is usually a place where our spirit lives. There, my ancestors encouraged important human-plant relationships and mediated core interactions that correlate with the abundance of certain plant communities, because we needed them, and in a sense, they chose to do this alongside us. Humbly, we have always been architects; we have been a people who are versed in many fields.

As usual, my work invites me to continue understanding the plant-human relations. This past weekend was no different as I traveled to New Jersey — to the unceded lands of the Nanticoke Lenni-Lenape, the Powhatan Renape Nation, and the Ramapough Lenape Indian Nation. I was there for the NDAL (**New Directions in the American Landscape**) Annual Symposium, attending through a kind scholarship offered by the Finger Lakes Native Plant Society.

The symposium was marketed as a space for the techniques of regionally-specific landscape analysis and design. I arrived with my own lens, and I left surprised by how people in a cross-cultural setting are beginning to define these techniques for themselves and for those they serve. To be honest, I haven't thought much about the people who architect the common spaces we move through in urban settings every day. It is easy to separate the human from the land — to treat design as a purely technical practice — but should it be?

Sitting in those sessions, I realized that these spaces tell us much about the people who design them. But the question I am left with is: Do they tell much about us? If a landscape is truly "restored" — which in most cases isn't a return to an ecologically functioning site, but rather a site crafted to produce a specific human experience — it should do more than just grow a majority of exotic plants and cultivars. It should be a place where the human and the land are no longer separate, and where the design speaks for ALL, with an emphasis on our non-human relations.

**The Synergy of Shared Health**

A subject that stood out for me is the immense potential for relationship-building between native plant focused communities and the landscape design community. While our "deliverables" might differ, our impacts overlap. Many designers seek to satisfy a client's desires, while I see myself as somewhat of a plant voice mediator. Without people falling in love with the plants we protect and the ecosystems that guard them, our work is incomplete.

There is a vital synergy in designers understanding the increasing risks of invasive species, and native plant advocates understanding the role of design in human connection. While designers mostly work to fulfill a client's vision of a childhood memoir or a community's history, native plant stewards do something similar: we strive to safeguard the integrity of those who make the places we inhabit possible.

**A Magical Interruption: Indigenous Science in Practice**

There was, however, a beautiful weaving of culture in this programming. Margo Robbins, a grandmother, fire specialist, and enrolled member of the Yurok Tribe, shared tremendous teachings of science through the revitalization of culture. She spoke of prescribing burns at night, but only after rigorous monitoring to ensure that species are not at a vulnerable stage in their reproductive cycles — ensuring they can physically escape the fire.

This is the bridge between technical management and cultural stewardship: understanding what species exist, what they contribute, and how to protect them within the very fire regimes that have shaped the landscapes of this continent for millennia.

**The Geography of Belonging**

Subsequently, another speaker, Elyzabeth Kennedy, delved into the subject of contextual boundaries. I understood this as the factors existing outside of geography that dictate whether we feel we can enter a space. It is a vital concept for understanding that not all communities are welcomed in all spaces. By recognizing these boundaries, we can identify the key elements needed to design a proper integration of diverse relations.

Sources	Core Focus
♦ Gareth Doherty: <i>Is Landscape...? Landscape Is...? and Landscape Fieldwork</i>	Identity and landscape design
♦ Genius Loci: <i>Towards A Phenomenology of Architecture</i>	Theoretical work on intentions in architecture
♦ National Geographic Society: <i>Edible: An Illustrated Guide to the World's Food Plants</i>	Guide to common taxa on edible species
♦ Landscape Architecture Foundation: <a href="#">A guidebook for metrics and methods</a>	
♦ Regional Invasive Species & Climate Change Network. <a href="#">RISCC Management</a>	Invasive species/Climate Change



## SOLSTICE RECIPE

## Jerusalem Artichoke Salad

By Anna Thomas, published 1972 in the *Vegetarian Epicure* aka the *Never-Fail Cookbook*

**Brought to the FLNPS Solstice by Rosemarie Parker**

[comments & alternatives in brackets]

Native ingredient: *Helianthus tuberosus*

This is very like a potato salad but with a more interesting taste and not quite so mealy. It is served chilled and makes a fine summer supper dish. [If you can find the tubers. They are generally harvested in the fall.] Serves 6

## INGREDIENTS

- 1 lb. Jerusalem artichokes [aka Sunchokes]
- Whites of 2 hard-cooked eggs
- 1 large red bell pepper
- 1 large dill pickle [I always use ~ 2 Tablespoons of India or sweet pickle relish]
- Green olives [I never add these]
- Pickled pearl onions [I just slice up 1-2 scallions]
- 1 crisp stalk celery
- 2/3 cup fresh green peas, steamed quickly
- Salt & pepper

## PREPARATION

Steam the artichokes 10-15 minutes [see note below], peel, and then chop them along with the egg whites, bell pepper, celery, pickle, pearl onions & olives [if used — she recommends about a dozen each] and mix all the ingredients. Season with salt & pepper & set aside to chill while you make the sauce.

## Old Fashioned Mayonnaise Sauce

## INGREDIENTS

- Yolks of 2 hard-cooked eggs
- 1 Tbs lemon juice
- 1 Tbs safflower [or sunflower] oil
- ¼ cup [4 Tbs] mayonnaise
- ¼ cup sour cream
- 2 tsp Dijon mustard
- Salt & pepper to taste

## PREPARATION

Mash the egg yolks, alternately add the lemon juice and the oil – a few drops at a time – creaming whisking] until smooth. Now add the mayonnaise, sour cream, and mustard; mix well. Add salt & pepper to taste. Pour this sauce over the salad and toss it up until it is well mixed, being careful not to mash the softer ingredients of the salad. Chill well.

[RP addendum – Cut the tubers if necessary to roughly the same size so that they cook at the same time. Try not to overcook, as that makes peeling harder. The result still tastes fine but is more mushy.]



## POET'S CORNER

Poem from MARY GILLILAND's *Within the Shop of the Divine* (Arc Publications, 2025)

## Going Places

And if I had chosen my locale  
by answering the nation's classifieds  
as though the soul, my only daughter,  
could be left behind, its yearning  
a music that fate disallowed?

Spring song nips from a high snag,  
the ending notes soft red arrows  
pricking the roots 'dusk.

The Devil stops with his bag of gold,  
wants only one thing in return.

Hands in pockets, I would likely  
learn to thrive where circumstance set me,  
sea wind woven in my cloth, or desert sun.  
But I've rainedrop on rock thirty years,  
the wormy old apple dropping its fruit.

### Plant Trivia ♦ by Norm Trigoboff

*Cycads are woody, evergreen, cone-bearing, dioecious seed plants that often look like ferns or palms. True or false:*

1. Cycads are most closely related to Ginkgo.
2. Cycads grow wild on every continent.
3. The largest cycad cones may weigh almost 100 lbs.
4. *Cycas revoluta* is easy to grow and can look like a tiny palm. It is often used for bonsai.
5. Cycads are one of the most endangered groups of living things.
6. Male cycad cones release a substance that first attracts insect pollinators then repels them.
7. Cycads often trap and digest insects in the water that fills the gaps between the leaf bases and the stem.
8. Cycad roots harbor bluegreen bacteria that release a neurotoxin that is then stored in the aboveground parts of the plants.
9. Most of today's cycad species were around in the age of dinosaurs.
10. Cycad species number about 30,000 in about 180 genera.

*See answers on page 7.*

## SOLSTICE RECIPE

## Quinoa and Broccoli Spoon Salad

By Sohla El-Waylly, Published *NY Times*, Feb. 25, 2023

brought to the FLNPS Solstice by Tracy Farrell

Native ingredients: cranberry

Total Time 30 minutes

This easily chopped salad fits loads of texture and flavor onto a spoon by combining finely chopped raw broccoli with chewy dried cranberries, crunchy pecans, fluffy quinoa, and chunks of sharp Cheddar cheese. The mixture is tossed in a punchy mustard vinaigrette that soaks into the florets, only getting better as it sits. Feel free to substitute the quinoa for any grain, like brown rice, farro, or buckwheat groats, though the cooking time may vary.

## INGREDIENTS

Yield: 4 to 6 servings

Kosher salt

1 cup quinoa, rinsed

1 lemon

3 tablespoons extra-virgin olive oil

3 tablespoons Dijon mustard

2 tablespoons honey

2 tablespoons apple cider vinegar

Freshly ground black pepper

1 large bunch broccoli (about 1½ pounds)

1 medium tart and crisp apple

4 ounces sharp Cheddar

¾ cup toasted pecans, roughly chopped

½ cup dried cranberries

## PREPARATION

## Step 1

Bring a medium pot of water to a boil on high and season aggressively with salt. Add the quinoa, then reduce the heat to maintain a simmer; cook until plump and tender, about 15 minutes. Transfer to a fine-mesh sieve; rinse with cool water and drain well.

## Step 2

While the quinoa cooks, finely grate the zest of the lemon into a large bowl then cut the lemon in half. Add the olive oil, mustard, honey and apple cider vinegar, plus the juice of ½ lemon; whisk together. Season with salt and pepper to taste.

## Step 3

Peel the stem of the broccoli and trim off the dry end. Finely chop the entire broccoli and add to the dressing. Core the apple then finely chop the apple and the

cheese; add to the broccoli and toss to combine.

## Step 4

Add the cooked quinoa, nuts and cranberries and toss to combine. Taste and add more salt, pepper and lemon juice, as needed. Store, refrigerated, for up to 3 days.



## Plant Trivia Answers ♦ by Norm Trigoboff

(from page 6)

## 1. True.

2. False. They like warmth. Cycads could live in Antarctica only as houseplants. Even then they would whine a lot.

3. True. *Lepidozamia peroffskyana* makes those huge cones. Cycad names may weigh a lot too.

## 4. True.

5. True due to their very slow growth, widespread deforestation and poachers paid by rabid plant collectors. About two thirds of cycad species are on the IUCN Red List of threatened species.

6. True. Weak concentrations attract the insects. Strong concentrations later repel them. With luck, the twice moved insects carry pollen to female plants.

## 7. False. Some tank bromeliads (air plants) do this.

8. True. They have coralloid, ageotropic roots that look like coral and grow up from the ground. Unprocessed plants would poison people. Sago or nari, made from the ground and much pounded, leached, and dried pith, may serve as food. Humans who eat animals who have eaten the seeds — the most toxic part of the plant — may suffer from the bluegreen's toxin (and other toxins made by the plants).

9. False. Many Cycads predated the dinosaurs, and the Jurassic is sometimes called The Age of Cycads, but those Cycads went extinct. The species we see today evolved later.

## 10. False. Maybe 210-300 species in 11 genera. See:

<https://en.wikipedia.org/wiki/Cycad>

<https://news.mongabay.com/2017/05/saving-the-most-endangered-plants-in-the-world/>

<https://ucmp.berkeley.edu/seedplants/cycadophyta/cycadlh.html#:~:text=Today%20only%20a%20handful%20of,slowly%20and%20reproduce%20s>

<https://edis.ifas.ufl.edu/publication/UW205>

[https://en.wikipedia.org/wiki/Cycas\\_revoluta](https://en.wikipedia.org/wiki/Cycas_revoluta)

<https://www.bbc.com/travel/article/20200106-how-a-plant-saved-a-japanese-island>

<https://en.wikipedia.org/wiki/Cycasin>



## Tiny Introduced Animals — A Smattering

By Norm Trigoboff

On a walk in December 2024 at A. H. Treman Marine State Park on Cayuga Lake, I stopped to scrape gunk from the side and bottom of a plastic floating dock. When I checked it later under a scope, a soft, somewhat flattened, bright pink ribbon worm with three pairs of eyes looked up at me.

North America has two species of freshwater ribbon worms, also known as proboscis worms, or nemerteans. Both are in the genus *Prostoma* of the mostly marine phylum Nemertea. A key feature of *P. canadiensis*, the one that for sure we have here, is a minute cup-shaped structure at its front end. This showed sometimes at 100× when the live animal moved around in an uncovered well slide. The worm's proboscis, a long, thin, flexible spiny structure used for feeding, showed after a drop of Neosynephrine hit it.

Earlier in 2024, two or three larger ribbon worms came home in gunk from somewhere — I should take better notes — on Cayuga Lake. I put the bubblegum colored worms aside to look at later, but they got lost in the shuffle of distracting bryozoans and hydrozoans, other minute aquatic animals that I wrote about in *Solidago* back in October and December of 2024. Since then, two more bryozoans showed up here, *Paludicella articulata* (on rocks and boat hulls and likely native) and *Pottsiella erecta* (on boat hulls and introduced from Southeast Asia).

In the fall of 2025, three tiny, pale pink young nemerteans came home in dock scrapings from Cayuga Inlet, then a small one came home in a piling scrape from the Ithaca Farmers Market dock and another small one showed up in a scrape from concrete near the outflow of Beebe Lake.

Scraping fouling gunk off docks and other places, then sorting through it later with a scope is less glamorous than it sounds. You may have to get belly-down and lean out at wild, hard-to-balance angles to reach below the waterline. A credit card on a stick helps. Still, some docks are strewn with gross (yet likely harmless) gull pellets. Raccoon scats are a different story. These may bear roundworm eggs that can harm people and pets.

*Prostoma canadiensis* has been found in Holland, Lake Huron, Lake Ontario and likely many other places under a different name or two. It's hard to say. Freshwater ribbon worms are tough to tell apart. This worm likes manmade structures, which suggests that it is a guest here. On the other hand, Adrianna Hirtler, who runs the creek assessment program for the Community Science Institute, has found ribbon worms in local creeks. These might be the same species. Our nemerteans might all be native.

Some days it seems like you can hardly swing a dead microscope lamp without hitting invasive invertebrates. On a December 2024 walk at Jones Beach on Long Island (an hour drive from New York City), I saw fist size clumps of

two well known invasive marine bryozoans blow across the beach: *Bugula neritina*, now found in much of the world, and *Tricellaria inopinata*, which is spreading and may soon cover the globe. I've walked that windy stretch of ocean beach and searched the sand for shells, seaweeds and other flotsam and jetsam since before Beatlemania and the rest of the British invasion. This was the first time these two drab gray tumbleweed-like things crossed my path, or maybe I just overlooked them. Each individual is minute, but numbers of them may form large colonies and cost much to clean off ship hulls. They, like all introduced species, may change native ecosystems in unknown ways.

Cayuga Lake, despite its developed shoreline, is a nice place to study shallow water life, thanks to the New York State Canal Corporation, which runs the locks and dams for the whole NYS canal system. They adjust Mud Lock, at the outflow of Cayuga Lake, to draw down the water starting in late fall and then raise it in early spring to the tune of about four and a half feet. This helps reduce ice damage in winter, flood damage in spring, and keeps the water at good depths for boaters and swimmers in summer. The big winter draw down bares rocks, mud, pilings and other habitats. It lets us walk the shoreline well below the summer water level and see what lived in the shallows. One more factor helps keep life interesting here: Cayuga Lake's link to the Erie Canal at its north end gives species from elsewhere, especially those that live at boat hull depths, an easy route into the lake.

The winter draw down might kill much of what lives in the shallow water. Or all of it might do just fine. The reproductive/over-wintering structures of tiny aquatic animals are pretty tough.



Winter 2025: This tree trunk and nearby rocks spent last summer submerged off Stewart Park. The yellow or gray patches that look a bit like lichens are sponge remains made up largely of gemmules, the reproductive structures of sponges. Photo by the author.

In the last few winters, some of the local exposed mud flats had, among other freshwater mollusk shells, empty shells of *Sagittunio nasutus*, the eastern pondmussel. This came from the Atlantic slope and is now present in much of New York State, though it's unrecorded from Cayuga Lake (Strayer and Jirka 1997). Still, it's easy to find, as on the mud off Lookout Point on the Cayuga Waterfront Trail south of the Ithaca Farmers Market. It likely got here in the last 25 years or so. Another good habitat for invertebrates is, of course, boat hulls.

*Urnatella gracilis*, a goblet worm, showed up as small dark patches on two hulls of a blocked (winterized) motorboat that had spent last summer in the inlet area of Cayuga Lake. This tiny, sessile, colonial, worm-shaped, invertebrate filter feeder is the only freshwater member of the phylum Entoprocta native to Eastern North America. To the naked eye, a colony of the animals looks like beard stubble. With a 10× hand lens, each minute animal looks like a short string of beads, much unlike any other local living thing. The ones I saw looked mostly black, likely from bacteria on their surface. They are just the kind of find an amateur naturalist loves: unique, easy to ID, and with one bit of luck (or in this case a few dried patches that came to maybe a couple of square inches) you get to be the expert on the local members of a whole phylum. On the other hand, I have yet to see one alive. Please get a hold of me if you're up for a warm weather *Urnatella* hunt.

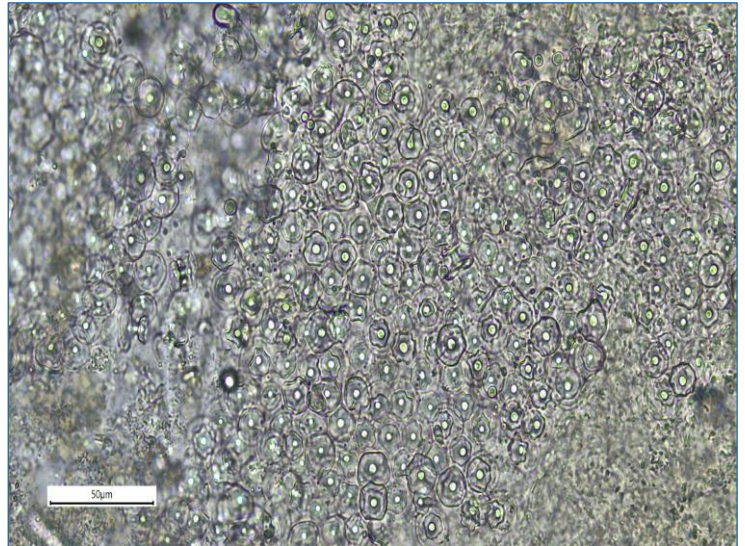
*Urnatella gracilis* was discovered in 1851 in Pennsylvania. By 1961, it had been seen in Iowa, Illinois, Indiana, Michigan, Texas, and Lake Erie (Weise 1961). Today, it lives in much of the world, including the Western U. S., Europe, Japan and Brazil. Two points suggest that this goblet worm is introduced in Cayuga Lake: This is (as far as I know) the first time it's been seen here and it grew on a manmade surface.

The *Urnatella* at Cayuga Lake was in a community that had native and introduced members, such as algae, zebra mussels, the freshwater bryozoans mentioned before (*Paludicella*, *Pottsiella* and likely others) and a handful of sponges. The lake has at least seven common species of freshwater sponge, all native, all lousy for kitchen use. They pretty much go unseen unless you make a special search for them.

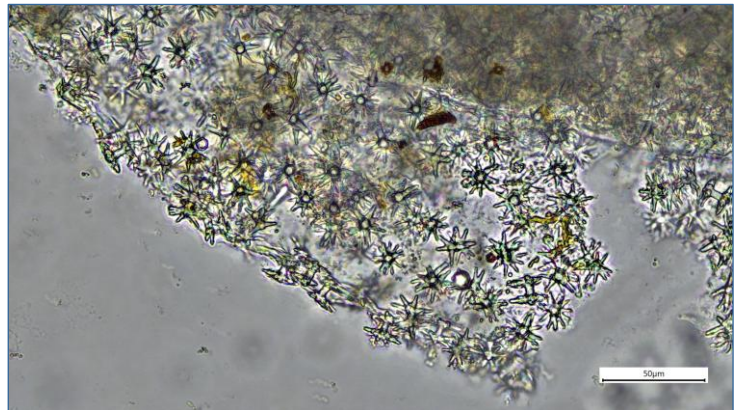
In the fall and early winter, the remains of the sponges, especially the gemmules, are easy to find. To the naked eye, the minute round gemmules look like tinier than usual amaranth, teff or red quinoa. One way to prepare them for the microscope is to cook them in nitric acid to dissolve all the soft tissue. This leaves the glass spicules, the minute structures we look at to tell which species they are. A safer recipe that clears the spicules almost as well is to put a few gemmules in a drop of chlorine bleach on a slide and wait. If done with care this shows how the spicules are arranged in life. A field of view filled with star shaped spicules all set at the same angle is one of the wonders of nature.



Gemmule spicules of the sponge *Heteromeyenia tubisperma*, photo by Selma Rosenthal.



Gemmule spicules of the sponge *Trochospongilla horrida*, photo by Selma Rosenthal.



Gemmule spicules of the sponge *Ephydatia muelleri*, photo by Selma Rosenthal. All Scale bars are 50µm.



Winter 2025: Cayuga Lake may go up and down a bunch of times each winter. This section of piling at Allen H. Treman State Marine Park shows where lake ice scraped the wood clean of living things. This leaves a good surface for aquatic pioneer species and it helps disperse algae, bryozoans, sponges and other sessile living things. On the down side, it shaves pressure treated wood particles into the lake.

In the past few years, researchers have started to look at how sponges, which are collected easily because they are common biofouling organisms on ship hulls, may help us study marine and freshwater ecosystems. All living things, including aquatic ones, shed some DNA or fragments of it. This environmental DNA, or eDNA, builds up in sponges as they filter their food from large amounts of water. Scientists can look at eDNA to learn what else lives in the water. The eDNA in the alcohol of preserved museum specimens of sponges can even show what used to live in the water. This may seem like a lot to soak up about sponges and eDNA in a short paper on invasive species. However, the eDNA trapped by sponges can tell us that invasives are here long before they grow abundant enough to spot. I wonder whether other filter feeders, such as bryozoans and mollusks and even fossils or at least sub-fossils would work.

One day last fall, three researchers from ESF and I searched a few spots on the Cayuga Lake shore for sponges. They showed me how to find sponges on rocks. I showed them how to find sponges on docks and boat hulls.

May they have luck with their eDNA and electron microscope research. That stuff is beyond my pay grade.

As a citizen scientist, I can start to think about invasive plants. They're big, easy to spot, and we sometimes see their effects. Tiny invasives are a whole different kettle of fish. Some get studied when they damage crops, farm animals, wildlife or water quality. Most others get little if any notice. Just how many there are, how their ranges have changed and how they change native ecosystems are poorly known. What's worse is that those who set shipping and trade policies likely would ignore this information even if we had it.

Many thanks to my hiking partner Gopi LaBranch, who sometimes stops and waits while I look at odd things, Petra Pierce, who likes winter walks, Aaron Ninokawa, Julia Maresca and Hanna Reich of The State University of New York College of Environmental Science and Forestry (ESF) for a nice field trip, Adrianna Hirtler, who lent me a nemertean saved from the Community Science Institute's survey of Lick Brook, Selma Rosenthal, who took the photos of sponge spicules, and the Teal and other boats and crews who helped.

Lastly, to mop up any loose ends, the sponges common in the Ithaca area are: *Ephydatia fluviatilis*, *Ephydatia muelleri*, *Eunapias fragilis* (by far the most common), *Heteromeyenia tubisperma*, *Radiospongillia crateriformis*, *Spongilla lacustris* and *Trochospongilla horrida*.

### General References

- Si.edu., 2016. Available at: [https://invasions.si.edu/nemesis/species\\_summary/156754](https://invasions.si.edu/nemesis/species_summary/156754).
- Strayer, D.L. and Jirka, K.J., 1997. *The pearly mussels of New York state* (Vol. 26). University of State of New York.
- Thorp, J. H. & Rogers, D. C. Eds. 2016. *Thorp and Covich's Freshwater Invertebrates: ecology and general biology*. (Vol. 1). Elsevier.
- Thorp, J. H. & Rogers, D. C. Eds. 2016. *Thorp and Covich's Freshwater Invertebrates (Fourth Edition) Keys to Nearctic Fauna*. London: Elsevier
- Weise, J.G., 1961. The ecology of *Urnatella gracilis* Leidy: Phylum Endoprocta. *Limnology and Oceanography*, 6(2), pp.228-230.



Snow Crystal Casts,  
by Robert Dirig



Ithaca, N.Y.,  
Winter 1972



## The Bargain

I forgive the young doe for eating the blackeyed susans,  
for hosta tops bitten just as the flowerheads formed.  
So intelligent — she waited for the sweetest mouthfuls.

She's the first deer to stand, to let me sing to her.  
A few brief chews, then she lifts her head like a bird,  
walks off calmly into the woods after swallowing fallen pears.

This is a good house. We let out a milksnake curled in the basement  
and moved in. Five years ago a stag browsed six-foot burdock.  
Above their spikes antlers rose before he bolted.

The animals go before us, prints marking woods edge and trail  
and the fair trade of the forest: lettuce and green beans.  
Fence wire bends where cleft hooves sank, darkening moist loam.



### *Additional Possible Native Vines for a Trellis*

**White Clematis or Virgin's Bower** (*Clematis virginiana*), left

**American Bittersweet** (*Celastrus scandens*), right.



## Ask A Native Plant Gardener

Hi all,

I'm in Spencerport near Rochester. I'm looking to build my wife a reading bench in the garden with a trellis & native vine privacy screen. I want something colorful and flowering to help set the vibe, but I'm having trouble finding species. Does anyone have suggestions? My wife loves wisteria, so I was thinking of trying the **American Wisteria** (*Wisteria frutescens*). Does anyone have experience with it? How does it compare to the traditional Asian ornamental?

I'm also thinking of **Coral Honeysuckle** (*Lonicera sempervirens*). However, from my understanding, both of these are more southeastern plants. Will they survive up here and will they still provide local ecological benefits? I know we can't be too purist when it comes to natives, but I don't know where to draw the line.

Best, Jeff Maggio

Hello Jeff,

Thank you for your interest in gardening with native plants. They are important for native pollinators and herbivorous insects. The **Coral Honeysuckle** (*Lonicera sempervirens*) is a great choice. It has a long bloom period. And it is native in southeastern NY and on Long Island, so growing it here is not that much of a stretch. It is a great hummingbird plant, too.

The **American Wisteria** (*Wisteria frutescens*), if you get the right version, is perfectly hardy here. It is widely grown in New York State. It is very attractive to large carpenter bees. The plant is native as far north and east as Virginia. The **Chinese Wisteria** (*Wisteria sinensis*) is seriously invasive here. Wisterias will get big and heavy, and so require a sturdy support, probably 4×4 inch posts. They will seem slow to establish at first, then will, if successful, really take off.

Some other species that you might consider are: **\*White Clematis** or **Virgin's Bower** (*Clematis virginiana*), **Dutchman's Pipevine** (*Isotrema macrophyllum*), wild **grapes** (*Vitis* spp.), **Virginia Creeper** (*Parthenocissus quinquefolia*), **\*American Bittersweet** (*Celastrus scandens*), **Hairy Honeysuckle** (*Lonicera hirsuta*) and **Prairie** or **Climbing Rose** (*Rosa setigera*). These are all locally native except the pipevine, whose natural range is as close as southwestern Pennsylvania and West Virginia.

It is greatly desirable to grow native plants that represent or simulate the genetic diversity of a wild population, rather than cultivars, which usually have little or no genetic diversity, and sometimes are sterile.

— Robert Wesley

**Prairie or  
Climbing Rose**  
(*Rosa setigera*)



\* See previous  
page for two  
more photos.

**Hairy  
Honeysuckle**  
(*Lonicera  
hirsuta*)



Photos by  
Robert Wesley

**We welcome readers' questions about growing native flora. Please send submissions to [info@fnps.org](mailto:info@fnps.org) with the subject ASK A GARDENER. Questions will be printed before the answer.**

