Solidago Newsletter of the

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

Volume 25, No. 3

8003

Finger Lakes Native Plant Society

October 2024

WALK REPORT



Asters & Goldenrods at North Park Preserve – 19 September 2024

by Rosemarie Parker photos by the author

ROBERT WESLEY led a walk to learn about asters and goldenrods found in our area. We certainly did not see all possible species, because any one site does not encompass all the habitats for these Asteraceae, but the Roy H. Park Preserve in Dryden has many of the most common species. Here is what we found, minus a few scarce or rare species that need protection. Comments are random points I noted in passing.

See the plant list on page 2.

Robert Wesley explaining Solidago identification to the group (above left and below).

And Solidago altissima at Roy H. Park Preserve (bottom left).





Plant List for the Roy H. Park Preserve in Dryden, N.Y., 19 September 2024

Species	Common name	Comment		
	Asters			
Doellingeria umbellata flat-topped white aster Moist areas				
Eurybia divaricata	white wood aster	Heart shaped leaves, dark stem		
Symphyotrichum lanceolatum	lance-leaved aster, tall white aster	Ubiquitous		
Symphyotrichum lateriflorum	calico aster	Horizontal branching & stem hairs in		
		lines; small flowers		
Symphyotrichum novae-angliae	New England aster	Fragrant, common		
Symphyotrichum pilosum var pringlii	Pringle's aster	Very tiny leaves, hairless		
Symphyotrichum prenanthoides	zig-zag aster, bushy aster, crooked-	Common, distinctive leaf shape:		
	stemmed aster	untoothed @ clasping base but toothed in swelling & tip		
Symphyotrichum puniceum	swamp aster	Large flowers, white hairy, broadly clasping leaf base		
Symphyotrichum urophyllum	arrow leaved aster	Strongly ascending branching		
Goldenrods				
Euthamia graminifolia	narrow-leaved goldenrod	Very distinctive corymb & leaves		
Solidago altissima	tall goldenrod	3-veined, most common		
Solidago bicolor	silverrod	Not much seen		
Solidago canadensis	Canada goldenrod	Less common, 3 veined		
Solidago gigantea	early goldenrod (but not the 1st)	3 veined, Wetland, smooth		
Solidago juncea	early goldenrod (1 st)	Large associated basal leaves & axillary leaf clusters		
Solidago nemoralis	old field goldenrod	Shorter		
Solidago rugosa	rough goldenrod	Depressed veins look "wrinkled"; few found in forest shade!		
	Other plants seen			
Alnus glutinosa	black alder	European species, invasive		
Chelone glabra	white turtlehead	Wet areas		
Cornus racemosa	grey dogwood			
Elaeagnus angustifolia	Russian olive	Non-native invasive		
Epifagus virginiana	beechdrops	Under Fagus grandifolia		
Eupatorium perfoliatum	boneset	Wet area		
Gentianella quinquifola	stiff gentian			
llex verticillata	winterberry	Very small, mowed?		
Onoclea sensibilis	sensitive fern	Near pond		
Picris hieracioides	oxtongue	Non-native, very weedy		
Rosa multiflora	multiflora rose	Non-native invasive, mowed or cut		
Rubus allegheniensis	common blackberry			
Rubus flagellaris	Dewberry	Tripping hazard		
Rubus hispidus	evergreen dewberry	Tripping hazard		
Salix bebbiana	Bebb's willow	5		
Salix discolor	pussy willow	Very light underside		
Spiranthes arcisepala	Appalachian ladies' tresses	Few, in lower foliage area		
Thelypteris noveboracensis	New York fern (in State Forest)	Very strong narrowing at base, runner not clumper		
Vaccinium angustifolium	lowbush blueberry	not dumper		

White Symphyotrichum have either **yellow centers** that turn to orange-brown with fertilization/aging, or **white centers** that change to reddish-purple.

A distinguishing feature to note for ID.

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

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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 fullpage 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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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.finps.org for details of membership, past *Solidago* issues, and updates about our programs.



Autumn Glory at Beebe Lake's North Shore, Cornell University campus, 15 October 1996. Photo by Robert Dirig.

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The Asian Freshwater Bryozoan — New to the Finger Lakes Region (Norm Trigoboff) • 11-12 8003



Plant Trivia • by Norm Trigoboff

- 1. How many leaves does it take to make a pound of finished tea (Camellia sinensis)?
- 2. Which country drinks the most tea per capita? Brazil, India, Britain, Ireland, Wyoming, China, Finland, Columbia, or Vietnam.
- **3a.** While visiting Dublin Ireland, you overhear a phrase that sounds like: tea shock. It refers to: A. Ireland's Prime Minister, B. a famous diorama of accidental kitchen electrocutions in the National Museum. C. the city's fine sewage system. D. tea spoiled by the water mold Phytophthora infestans. E. the city's fine Georgian architecture. F. the kind of semiconductor used in most microchips today. G. a kind of Sargassum found in the Irish Sea. H. a red seaweed also known as Irish moss. I. a slippery green byproduct of tea factories. J. a kind of tea that has leaves still floating in it.
- **3b.** While visiting Cornell Campus, you overhear a phrase that sounds like: sea moss. What might it mean? (Same choices as 3a. Two right answers. Hint: it's not the PM.)
- 4. Which country drinks the most coffee per capita? (See choices from question 2.)
- **5.** Which country is the second biggest coffee producer in the world? (Use choices from question 2.) Hint: Brazil is number one.
- **6.** Which much praised novel was once banned partly because of phrases like: see you in tea?
- 7. This photo suggests which native plant common name? Hint: look for wordplay.



- 8. Name the odd one out: chickweed, white pine, blackberry, red clover, velvet grass, goldenrod, arborvitae.
- 9. Name a pair of somewhat similar plants that can be told apart by – among other things – their sound. Hint: this has nothing to do with the Irish PM.
- 10. Name the odd one out: Sugar Hill, Cinnamon Lake, Turkey Hill, Potato Hill, Ravioli Gulf, Beaver Dam, Beaver Flow, Texas Hollow, Cliffside, Frozen Ocean.

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See answers on page 5.

LETTER

Dear Editor of Solidago,

I am thinking about starting a native plant business in the Binghamton area, and am looking for a possible partner. I'm wondering if any of your readers would be interested in this?

> Thank you, Lisa Letcher 607-768-8377

Text preferred. If phoning, please leave a message if I don't answer.

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★Note to Readers★

The FLNPS Steering Committee welcomes suggestions for workshops from members. Please let us know what you would like to learn more about in a workshop setting (reply to info@flnps.org).

Thank You!

WE ARE GRATEFUL for the contributions of writers Fred Haynes, Lisa Letcher, Rosemarie Parker, Norm Trigoboff, David Werier, & Robert Dirig. Images were shared by photographers Fred Haynes (pp. 6 & 8), Rosemarie Parker (pp. 1 & 9-10), Norm Trigoboff (pp. 4 & 11-12), David Werier (p. 5), & Robert Dirig (p. 3).

Layout & design by the Editor, careful proof-reading by Rosemarie Parker & Norm Trigoboff, and *printing* by Gnomon Copy. Anna Stalter emailed copies, Pat Curran mailed paper copies, & Rosemarie posted to the web.

Please check our website (www.flnps. org) regularly throughout the autumn for announcements and details of walks 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 delightful autumn, filled with joyous outdoor revels with the colorful fall foliage!

- Robert Dirig

NAME THAT PLANT CONTEST

The photo from last issue's NAME THAT PLANT CONTEST [Solidago 25(2), p. 6] was of the **Broad Beech Fern** (*Phegopteris hexagonoptera*). This is one of the less common ferns of central New York, although it can be found on occasion here in small patches, in rich, moist, forested uplands. As the common name suggests, its leaves are generally broader, as well as broader-to-long, compared to its close relative the **Long Beech Fern** (*Phegopteris connectilis*), although other characters are better at distinguishing the two. Thanks to all who entered the contest and congratulations to contest winners: **BOB DIRIG, SUSANNE LORBEER,** and **ROSEMARIE PARKER**.

This issue's mystery plant (the dominant vascular plant, not the bryophytes) 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

The photographs were taken on August 3, 2024 in Essex County, N.Y., by David Werier.

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Plant Trivia Answers

by Norm Trigoboff

- **1.** 2000.
- 2. Ireland.
- **3a. A.** The Gaelic title for the PM of Ireland is Taoiseach, which sounds to us like tea shock. (*P. infestans* caused the Irish Potato Famine of 1845-1852.)
- **3b. F.** & **H.** CMOS, pronounced sea moss by the cognoscente, stands for complementary metal oxide semiconductor. *Chondrus crispus*, or Irish Sea Moss, is edible and widely harvested for carrageenan, a common food thickener, AKA E407 in the EU.
- **4.** Finland. The next top finishers, roughly in order, are Norway, Iceland, Denmark, Netherlands, Sweden, Switzerland, Belgium, Luxembourg and Canada. See:

https://worldpopulationreview.com/country-rankings/coffee-consumption-by-country

- **5.** Vietnam. Trivia question without an answer: Did the wars there have to do with coffee?
- **6.** For years, *Ulysses* by the great Irish writer James Joyce was banned for obscenity in Ireland, England, the U.S. and Canada. Though it now tops most lists of the best books of all time, it was burned by the more militant censors of all four countries. Whiskey Tango Foxtrot?
 - 7. Cinquefoil.
- **8.** Except for velvet grass, the leaves (and in some cases other parts) of these plants are popular in teas. Trivia: goldenrod, a decongestant, was a big part of Liberty Tea, which the colonists drank after the Boston Tea Party. Though goldenrod tea helps expel mucous and tyrannical imperialist oppressors, some American goldenrod species, like some American corporate interests, are now unwanted guests in much of the world.
- **9.** Milkweed leaves make as much sound as pouring a glass of milk. Dogbane leaves squeak when rubbed together, or at least some sources say so. I've had little if any luck with this in the field. This question would've worked so much better if milkweed gurgled and dogbane barked.
- **10.** These are New York State Forests within 30 miles of Ithaca, except Ravioli Gulf, which I cooked up. (C'mon, Beaver Flow? Seriously?)

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WALK REPORT

A Late Spring Visit to Three Falls Woods • by Fred Haynes

On June 30th 2024, about a dozen FLNPS members met *David Dubois* (Land Steward at Baltimore Woods Nature Center in Onondaga County, N.Y.) for a botanical walk through *Three Falls Woods Preserve* in Manlius, N.Y. David led us along multiple trails through the 175-acre preserve that is owned and managed by the Central New York Land Trust, Inc.



David shows us **Prickly Ash** (*Zanthoxylum americanum*), the preferred larval foodplant for Giant Swallowtail butterflies (*Papilio cresphontes*). We did not spot any eggs or caterpillars.



The group checks state-endangered (S1S2) **Carey's Sedge**, found in less than 20 locations statewide. *Carex careyana* likes calcareous bedrock, deep rich calcareous soil, and mesic hardwood forests.

Three Falls Woods lies at the eastern end of the seven-mile-long Onondaga Escarpment Nature Corridor. Better well known *Clark Reservation State Park* lies at the western end. The two parks/ preserves bookend the active *Jamesville Quarry*, which has provided limestone for various needs for nearly 200 years. Although the quarrying has destroyed much of the natural escarpment, the land at either end is now protected.

A significant portion of Three Falls Woods is recognized as *old growth forest*, with hardwood trees older than 150 years in the karsted topography atop the limestone escarpment. These include maples, dogwood, hop hornbeam (ironwood), hemlock, chinquapin and red oaks, hackberry, and more.



We observed several ferns thriving in the calcareous soils and shade of the old growth forest (*from left to right*):







Rattlesnake Fern (Botrypus virginianus), Bulblet Bladder Fern (Cystopteris bulbifera), Maidenhair Spleenwort (Asplenium trichomanes), and Marginal Wood Fern (Dryopteris marginalis). Photos by Fred Haynes

Plants seen at Three Falls Woods, June $30^{\rm th}$ & July $7^{\rm th}\,2024$

Species	Common Name	Notes
Actaea pachypoda	doll's eyes/white baneberry	in fruit
Actaea rubra	red baneberry	in fruit
Adiantum pedatum	maidenhair fern	
Agrimonia sp	agrimony	
Anemone virginiana	thimble weed	in bloom
Ariseama triphyllum	Jack-in-the-pulpit	not many
Asarum canadense	wild ginger	
Asclepias incarnata	swamp milkweed	
Asclepias tuberosa	butterfly weed	in bloom
Asplenium platyneuron	ebony spleenwort	III bloom
Asplenium trichomanes	maidenhair spleenwort	
Botrypus virginianus	rattlesnake fern	
Juniperus communis		
Carex careyana	common juniper Carey's sedge	New York S1S2 endangered species
Carex pedunculata	long-stalked sedge	New fork 3132 endangered species
Carex platyphylla	broad leaf sedge	
Carex sylvatica	European woodland sedge	State Tier 2 invasive
Caulophyllum giganteum	giant blue cohosh	could be C. thalictoides
Celtus occidentalis	hackberry	could be c. trialictorides
Centaurea jacea/nigra	knapweed	State Tier 4 invasive
Clinopodium vulgare	wild basil	State Her 4 invasive
Cornus alternifolia	pagoda dogwood	
Cystopteris bulbifera	bulbet-bladder fern	
Dianthus armeria	Deptford pink	
Drepanocladus aduncus	hook-moss	in small karsted sink hole
Dryopteris intermedia	intermediate wood fern	III SHIdii Karstea shik Hole
Dryopteris marginalis	marginal wood fern	
Echinacea purpurea	purple coneflower	near the parking lot
Elymus hystrix	bottlebrush grass	In fruit
Epipactus helleborine	poor man's lady slipper	very light color flower
Epithemia sp.	algae containing diatom	on D. aduncus
Fontinalis sullivantii	Sullivant's Water Moss	with D. aduncus
Fragaria vesca?	strawberry	not certain about species
Hydrophyllum virginianum	Virginia waterleaf	
Iris sp.	garden iris	purple (garden escape?)
Lapsana communis	nipplewort	
Ludwigia laustris	marsh purslane	
Maianthemum racemosa	Solomon's plume	In fruit
Meliotis alba	sweet white clover	
Menispermum canadense	Canada moonseed	did not see blooms/fruit
Ostrya virginiana	American hop-hornbeam	also known as ironwood
Patis racemosa	black-fruited mountain ricegrass	
Phlox divaricata	blue wood phlox	
Phryma leptostachya	lopseed	
Podophyllum peltatum	mayapple	scarce

Polymnia canadensis	leafcup	
Polypodium virginianum	common rock polypody	
Polystichum acrostichoides	Christmas fern	
Potentilla recta	Rough-fruited cinquefoil	near the parking lot
Prunus serotina	black cherry	
Quercus macrocarpa	bur oak	likely hybrid (*see photo below)
Quercus muehlenbergii	chinkapin Oak	dominant oak in places
Quercus rubra	red oak	
Ranunculus abortivus	kidney leaf buttercup	
Ranunculus aquatilis	White water buttercup	In flower in vernal pool
Sanicula canadensis	sanicle	in fruit
Solidago caesia	wreath goldenrod	
Solidago flexicaulis	zig-zag goldenrod	
Staphylea trifolia	American bladdernut	
Symphyotrichum cordifolium	heart-leaved aster	
Thalictrum dioicum	early meadow rue	
Thuja occidentalis	eastern arborvitae/white cedar	A small grove!
Tilia americana	American basswood	
Triosteum aurantiacum	Orange-fruited horse gentian	
Trillium grandiflorum	white trillium	based on white ovary
Ulmus rubra	slippery elm	
Viburnum acerifolium	maple leaved viburnum	
Viola spp.	violet	stemless, very sharp point
Zanthoxylum americanum	prickly ash	host for Giant Swallowtail

We did not keep a complete plant list while in the field. This list was compiled with input from Fred Haynes, David DuBois, Kathy McGrath, and Norm Trigoboff, after the June 30th trip. Rosemarie Parker visited Three Falls Woods on July 7th 2024 and contributed additional observed species.

Please see Rosemarie's lead article in the last issue of Solidago (Vol. 25, No. 2, pp. 1-3) for more photos and information.



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*and a possible hybrid between Bur Oak (Quercus macrocarpa) ➤ & another oak species, perhaps Chinquapin Oak

at Three Falls Woods on June 30th 2024.

Photos by Fred Haynes



WALK REPORT



A "Little Brown Mushroom" (LBM)

A cup fungus

Spring Mushroom Walk

by Rosemarie Parker, photos by the author

CORNELL NATURAL AREAS STEWARD Emma Gutierrez took FLNPS members and friends on a fun fungi walk last May at Ringwood Preserve. The best time for a fungus walk is about 3 days after a rain, but rain had been scarce in the preceding days. Thus, Emma gave us a tutorial on mushroom types, we investigated the smaller fungi that hang around even in dry periods, and we learned recipes from edible mushroom aficionado and assistant walk leader, Zack Despreaux.

Ringwood is lovely that time of year, with blooming azaleas and wetland species. Although we did not see any spectacular or colorful mushrooms, we enjoyed finding many different fungi on logs, trees, rocks, and earth.





Rhododendron periclymenoides along the roadside

Ringwood
hosts a variety
of amphibians.
Two were "out
and about":
An
American
Toad

Emma and & Zack discussing mushrooms on logs.



And a frog



FINGER LAKES NATURAL HISTORY

The Asian Freshwater Bryozoan — New to the Finger Lakes Region by Norm Trigoboff

On September 8, 2024, at the New York Flora Association Field Trip to Owasco Flats, when we were about a quarter mile south of Owasco Lake, someone pulled a pondweed from the Inlet. One leaf blade bore a split-pea size yellow glob. I checked with a 10× hand lens. With the glob was a **statoblast** (Fig. 1), a minute seed-like reproductive structure of a bryozoan. Our region has at least two common bryozoans: the big, roundish, clear jelly-like *Pectinatella magnifica* (Fig. 5), which is what many people picture when they hear the word bryozoan, and the small brown encrusting *Plumatella repens*, perhaps the most common one in the U.S. This yellow one was new to me.

A look with a microscope showed that the statoblast was from the **Asian Freshwater Bryozoan**, **Lophopodella carteri** (**Hyatt 1865**). Its unique statoblast bears spines at each end with curved hooks that jut from each spine (Fig. 2). This species is known from the Great Lakes and scattered lakes and ponds in the Northeast. It disperses readily, likes basic water, and is more common in late summer. It likely came to the Northeast in the early 1930's. Few people look for it, so it's likely at far more sites than the books say.

You may confuse bryozoans with bryophytes. To clarify: bryophytes include mosses and plants related to moss. Bryozoans are animals that look like moss. All the two have in common is that they are tiny forms of life with the prefix bryo-. Bryozoan, which means moss animal, is the common name for a member of the invertebrate phylum Ectoprocta. This has 8,000+ marine species and about 100 freshwater ones. Each individual bryozoan contains a bunch of microscopic zooids, each with a fan of cilia-covered tentacles that filter particles from the water (Figs. 3 & 4). Lophopodella eats mostly protozoans and rotifers. Though minute, the numbers of bryozoans may be great and their effects may add up. A study of one bryozoan species suggested that it drops twice the weight of fecal pellets in a lake than fish or waterfowl do.

The day after the Owasco trip, Lopho-podella showed up close to home on duck-weed (Lemna minor) at Stewart Park and nearby Six Mile Creek. A few days later, I found it on eelgrass (Vallisneria americana), pondweed (Potamogeton sp.), and the undersides of water lily (Nymphaea sp.) leaves in the Cayuga Lake Inlet by the Ithaca Farmers Market.

A few days later at the boat docks of the Allen H. Treman State Marine Park, I pulled water lily and pondweed leaves from the turbid water and checked them without luck. A boat owner told me he had brought his boat up from New Jersey a day ago. He had hosed down the hull and didn't think I would find a thing. Still, I should've looked. A Lophopodella statoblast (Fig. 1) is black and about a millimeter long. In

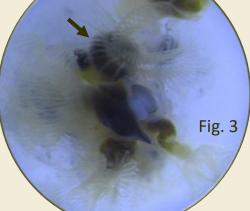


statoblast (x40)



hooks on statoblast spines (x400)

Lophopodella carteri



U-shaped lophophore (arrow)



Lophopodella zooids with tentacles extended. At the lower left is a clump of Sinantherina, a colonial rotifer.

The scale is in mm (top).

more familiar terms: to the naked eye, it looks much like a small deer tick. Reproductive parts of other animals and plants may also be minute. When we ask boaters to help stop the spread of invasive species, do we mean for them to do something like a tick check for a boat? (Okay, your front is good. Turn around. Let me see your poop deck.) My guess is that boats are seldom if ever cleaned of every last seed or statoblast. Some old papers speculate that aquatic species spread on waterfowl feathers and in fish stomachs. Such concerns now seem superfluous.

I got the okay to check two boats at the marina and checked a nearby floating dock. If there was any Lophopodella at the marina, I missed it. One decaying mass of Pectinatella magnifica about a meter long floated alone in the water, but statoblasts, sometimes stuck to small clear gooey bits of that species, were everywhere. Plumatella repens showed up on eelgrass and as a fouling organism on the boat hulls, as did Fredericella indica, a bryozoan said to be common, but which was new to me. Fred was dense and abundant on the floating docks. (Excuse me for jumping straight to a more-or-less acceptable common name. It's time we dropped the grand American tradition of first choosing a racially offensive common name and then fixing it.) Other minute filter feeders, such as colorless and green flavors of Stentor polymorphus, an attached, shaped ciliate that sometimes harbors green algae, filled gaps among the bryozoans.

Lophopodella usually has a green striped stomach. The stomach cells look like they hold round green algae (or perhaps bluegreens) as endosymbionts. You'd think someone would have written about this. If I had a budget, I'd look into it.

Lophopodella is pretty and easy to culture, but it has very few behaviors and it's hard — I imagine — to teach it tricks. The ones that I kept ate, pooped, withdrew tentacles when disturbed, and released caught particles or animals that were too big to eat. It can crawl too, though a bit too slowly to be interesting, or even noticed.

Do we want Asian freshwater bryozoans here? Bryozoans are harmless to those who swim in or drink lake water. If anything, they make the water clearer. (Some encrusting bryozoans cause trouble when they clog fishing nets, or water pipes and screens used for irrigation, fountains, water treatment, or industrial cooling.) The word Asian suggests that they might belong somewhere else. On the other hand, though they've been here almost a hundred years, the USGS webpage says little about whether they are harmful, harmless, or helpful, just this brief, definitive statement: "The ecological impact of L. carteri has not yet been thoroughly investigated." By the way, our big, sometimes scary Pectinatella magnifica (Fig. 5), which is native to the Northeast, has spread to the West, Europe, and Asia. As with L. carteri, its impacts have yet to be explored.

Many thanks to Bud Norvell, Joe O'Rourke, and Anne Marie Whelan for travel help, David DuBois for leading the walk at Owasco Flats, and Tim Wood for sharing knowledge, literature, and enthusiasm.



Pectinatella magnifica at Teeter Pond, Finger Lakes National Forest, August 31, 2021.

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