

Network News



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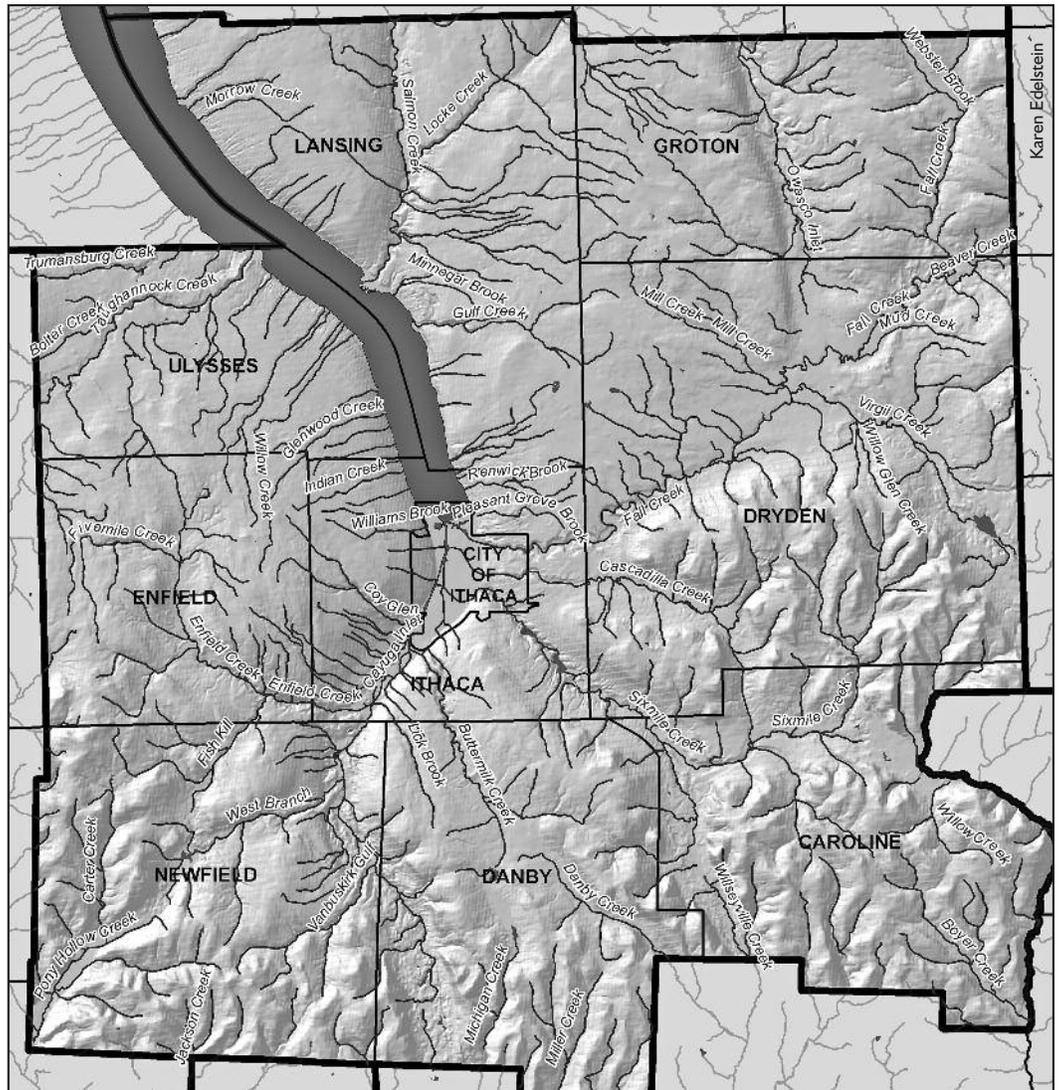


Important First Steps Taken to Protect Cayuga Lake from Gas Drilling Impacts

by Hilary Lambert, Steward

Over a span of one month, four Tompkins County towns at the south end of Cayuga Lake passed amendments to their zoning ordinances affirming the inappropriateness of natural gas/petroleum drilling and support activities as land uses within their borders. The significance of these actions for protection of Cayuga Lake's waters and creeks deserves comment, with a look at the map for better understanding.

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Our Board of Directors

For the information of our members, provided below is a list with photos of our current Board of Directors, returning and new. A brief biography of each member will be posted to our website. We welcome new board members Michael Dineen, Patricia Haines, Jackie Bangs, and Mark Witmer.

The Cayuga Lake Watershed Network Board of Directors maintains a mix of three representatives each from the three main counties around Cayuga Lake, plus six at-large members. There are vacancies: suggestions and self-nominations are welcome for board member candidates ready to work hard on behalf of our lake and watershed.

Board members representing Cayuga County:



Scott Heinekamp



Dan Hill

Board members representing Tompkins County:

Brian Boerman (*no photo*)



Deb Grantham



John Mawdsley

Board members representing Seneca County:

Keith Tidball (*no photo*)



Michael Dineen



Jim Clark

At-Large Board Members:

Dale Baker (*no photo*)

Jackie Bangs (*no photo*)



Patricia Haines



Mark Witmer

Cayuga Lake Watershed Network

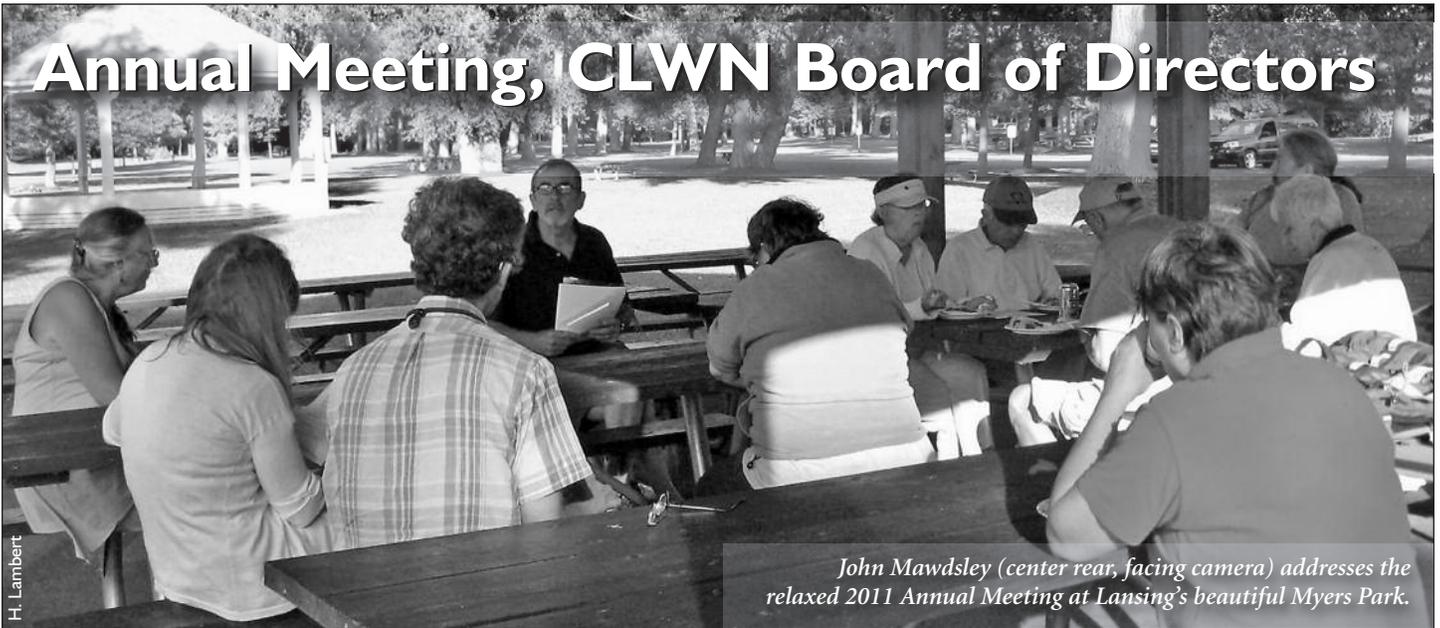
170 Main St., PO Box 348
Aurora, NY 13026
www.cayugalake.org
Steward Cell . . .859-421-3609
Office315-364-2992
Fax315-364-2991

OFFICE HOURS:
Tuesday and Thursday
10am - 5pm
And by Appointment

STAFF:
Hilary Lambert, *Steward* –
steward@cayugalake.org
Ashley Benning, *Office Staff*
Ryan Huggins, *Intern*

The Cayuga Lake Watershed Network thanks Westhill Graphics of Ithaca and Pioneer Printing of Lodi for their support and excellence.

Annual Meeting, CLWN Board of Directors



John Mawdsley (center rear, facing camera) addresses the relaxed 2011 Annual Meeting at Lansing's beautiful Myers Park.

The 2011 Annual Meeting held for our membership by our Board of Directors took place the evening of Wednesday, August 10th at a picnic pavilion in beautiful Myers Park in Lansing. The evening was fine and still; several members who live or have cottages nearby attended, joining old and new board members in a fine little picnic supper with cookout.

Outgoing Board Chair John Mawdsley provided his annual report on the Network's 2010-2011 activities, provided below as a bullet-point list of high points. Previously nominated new Board Chair, Deb Grantham, was voted into office along with several new board members. Our grateful thanks go to outgoing members Ruth Richardson, David Stilwell, and Amy Galford: Please stay nearby and in touch, to support our work on behalf of the lake and tributaries! And thank you John Mawdsley for your steady hand at the helm during a big period of transition for the Network! For the year 2011-12, Executive Committee members are Deb Grantham, Chair; Vice Chairs Scott Heinekamp (Cayuga), Dale Baker (Tompkins), Keith Tidball (Seneca); Brian Boerman, Secretary; John Mawdsley, Treasurer.

Major achievements of the year:

- Much expanded our Embrace the Lake creek cleanup program, with wide participation of scouts, community groups, churches, paddlers and other groups.
- Worked actively with Town groups to help get Dryden, Ulysses and Ithaca to pass ordinance to stop hydrofracking in these towns (see article, front page).
- Continued to work on developing an education and outreach program for on-site wastewater treatment systems.
- Held semi-annual public meetings at north end and south end of the lake. Last spring, at the north end, a conference was held to help educate people on the importance and value of wetlands; and last fall at the south end, a half-day conference focused on several

water-related issues of concern: climate change impacts on water resources, dredging the Cayuga Inlet, and how municipalities can prepare for gas drilling. (Presentations available at www.cayugalake.org)

- Worked with Floating Classroom to coordinate more closely our programs and to help encourage EcoCruises for the general public. Steward Lambert hosted a local wines and cheeses EcoCruise in mid-July with the theme, "Challenges Facing Cayuga Lake and its Watershed."
- Our Watershed Steward participated in national meetings of River Network and Freshwater Future, presenting on the potential impacts of hydrofracking and learning about climate change.
- Worked with the newly formed Finger Lakes Regional Watershed Alliance, an alliance of representative lake associations of each Finger Lake, to have more impact on government and private decision makers on issues of great potential impact to the water quality and ecological health of the watersheds in the Finger Lakes. In May, the FLRWA issued a position paper on hydrofracking stating that the Finger Lakes are not an appropriate area for this activity; and are working on other issues including landfills, invasives and other regional challenges.
- The Dashboard: The Issues Committee continued to work on a presentation and report to the public on the current health of the watershed. This will be a regularly updated series of reports.
- Published and mailed four issues of our newsletter, *Network News*.
- With the help of student interns, we maintain a Facebook page, Cayuga Lake Watershed Network. Join us – like us! 🐾

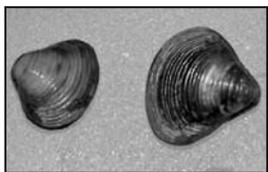
Cayuga's Uninvited Guests: Hydrilla and the Asian Clam

by Ashley Benning, staff

This summer in Cayuga Lake saw some uninvited tourists. Both the Asian Clam and the waterweed Hydrilla have been in the US for years but have been found in and around Cayuga Lake in just the past few months. During August, a floating Hydrilla segment was found by the Floating Classroom in the Cayuga Inlet and larger populations have since been identified by Aquatic Ecologist Bob Johnson and other experts, rooted into the bottom of the Inlet and apparently heading out toward the open lake. A large population of Asian Clam has been mapped by divers at the north end of Owasco Lake, our neighboring Finger Lake to the east. One empty shell has been found on a beach at the north end of Cayuga Lake, although followup searches have yielded no more shells or live animals on Cayuga's shores.

Asian Clam and why it is a problem

The Asian Clam (*Corbicula fluminea*) is a bivalve, meaning it has two shells with a hinge. They are small, no bigger than one and a half inches on average.

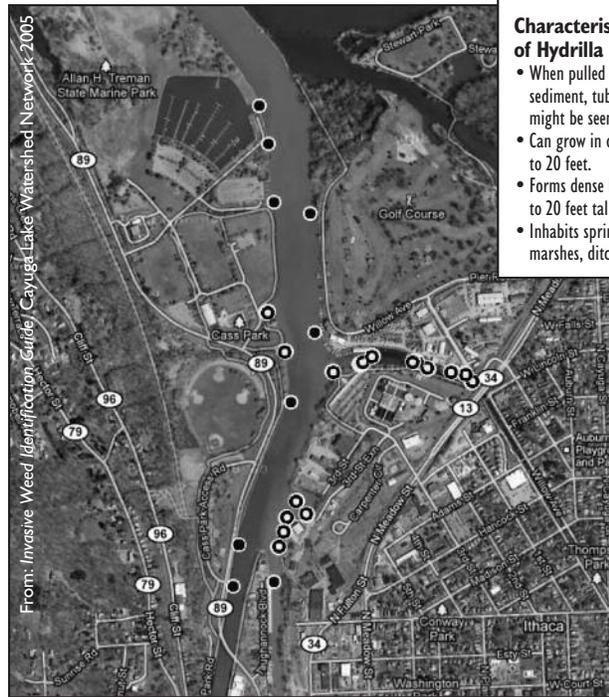


The Asian Clam (*Corbicula fluminea*).

They are light green and light brown, and have distinct ridges on the shell. Inside of the shell

there are two lateral teeth and three cardinal teeth, which differentiate them from the Fingernail Clam. The lateral teeth can be found along the inside ridges on the left and right, while the cardinal teeth are located near the hinge. They prefer to live in sandy waters near the shore, where they can keep warm.

The problem with the Asian Clam is mainly its waste, which happens to

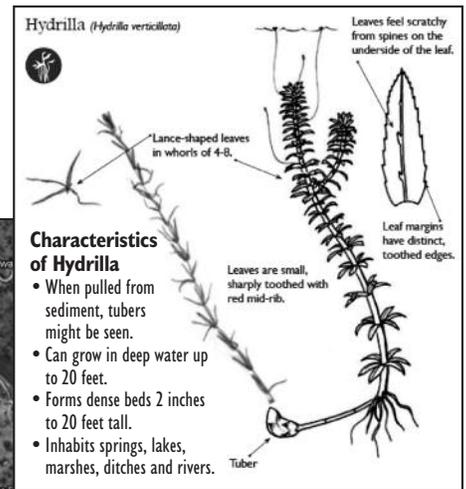


Known locations of Hydrilla in the Cayuga Inlet as of August 29, 2011. Open white circles indicate areas of densest infestation whereas closed purple circles indicate presence of rooted fragments. Additional surveys since then have found plants rooted in the Inlet out to the lighthouse and a floating fragment beyond. More surveys will further delineate the extent of present Hydrilla infestation.

be full of nutrients. These nutrients heighten the growth of algae and weeds in the lake, mucking up our otherwise clear waters. They tend to form groups in pipes, clogging boat engines and cooling systems and also compete with native mussels.

Hydrilla and why it is a problem

Hydrilla (*Hydrilla verticillata*) is an Asian invasive that has been in America since the 1960s, and is a menace across our nation's southern waterways, where it covers wide areas of open water and smothers out other plants and animals. Hydrilla is costly to control, and almost impossible to eradicate once established; for example, Florida spends \$30 million dollars a year in control and management. It is a waterweed with a long, thin stem. When the plant is rooted, it



Characteristics of Hydrilla

- When pulled from sediment, tubers might be seen.
- Can grow in deep water up to 20 feet.
- Forms dense beds 2 inches to 20 feet tall.
- Inhabits springs, lakes, marshes, ditches and rivers.

grows tall enough to break the surface, though it also grows in free-floating chunks. The leaves of Hydrilla are small, about 6-20mm long and 2-4 mm wide and grow in whorls. This means that they grow in a circle around the stem, and there are 3-8 leaves in a whorl. Hydrilla can look a lot like some native plants, but with a few minor differences. First, Hydrilla leaves have serrated, or saw-toothed, edges. Also, on the

bottom side of the leaf on the center vein are "teeth" that make the leaves feel rough to the touch.

The problem with this weed is that it is highly competitive. This plant chokes out native plants and take over entire waterbodies. Hydrilla spreads quickly, reproducing with underground tubers, seeds, and by free floating segments. It also has the ability to photosynthesize in low levels of light, meaning that the plants can create energy and grow in deep water. This also means that they can photosynthesize for longer during the day, starting earlier and ending later than other aquatic plants. Hydrilla is known to have grown in depths of up to 15 meters. This means that if we don't act soon, this plant could clog the lake from top to bottom, and from the shore far into the lake.

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EcoCruise: Local Wines & Cheeses Afloat!

On a hot day in mid-July, Steward Hilary Lambert boarded the M/V Haendel to be that week's EcoCruise speaker, on the topic of "Challenges Facing Cayuga Lake and its Watershed." Along with her talk, Lambert provided local wines and cheeses for the delectation of the 20 passengers who boarded at the Ithaca Farmers Market dock.

Thanks go to the *Haendel's* crew, who helped point out water quality-related and historical landmarks as we cruised the southern end of the lake for two fun – and hot – hours. Great big thanks to the wineries and cheesemakers who donated their wonderful products in support of Lambert's main presentation point: these delicious natural products require continued high-quality water, air and agricultural landscapes in order to prosper. A secure future for Finger Lakes residents revolves around the jobs created by enterprises like these. Here's a toast to future cruises focused on our local wines, cheeses and other produce! EcoCruises are community cruises co-sponsored by the Floating Classroom and TioHero Tours. More information: www.tioherotours.com.

Participating wineries

- **Ports of New York:** Meleau Semi-dry, White and Red Port. Located in Ithaca NY, online at cheers@portsofnewyork.com.
- **Sheldrake Point Vineyard:** Luckystone Red, Waterfall Chardonnay, Luckystone White. Located in Sheldrake Point NY, online at sheldrakepoint.com.
- **Six Mile Creek Vineyard:** Ithaca Red, Ithaca White. Located in Ithaca NY, online at sixmilecreek.com.

Participating cheesemakers

- **Finger Lakes Farmstead Cheese:** Bier Meck Gouda, Schuyler Gouda. Located in Mecklenburg NY, online at fingerlakes-cheese.com.
- **Finger Lakes Dexter Creamery:** Kefir cheese - probiotic, edible for those with lactose problems, delicious! Located in King Ferry NY, online at kefircheese.com.
- **Side Hill Acres:** Goat cheeses - Italian herb, rosemary garlic, cranberry-cinnamon. Located in Candor NY, online at sidehillacres.bizland.com.

*For more information about these and other regional wines and cheeses, go to: **Finger Lakes Wines Trail** at fingerlakeswinecountry.com; **Finger Lakes Cheese Trail** at flcheesetrail.com.*



Local wines and cheeses were the focus of a mid-summer lake cruise.

Important First Steps Taken to Protect Cayuga Lake from Gas Drilling Impacts continued from cover

On July 11 2011, the Ithaca Town Board unanimously passed TB Resolution No. 2011- : Resolution Adopting “A Local Law Amending The Zoning Chapter Of The Town Of Ithaca Code To Add Definition For Forest Resource, Clarify Definition Of Mining, And Clarify Permitted Principal Use In Light Industrial Zone Regarding Fabrication And Assembly.” This document may be viewed in full at <http://www.town.ithaca.ny.us/minutes/> .

On August 2 2011, the Dryden Town Board unanimously passed Resolution No. 126 (2011) – “Resolution In Support Of Adopting Amendments To The Town Of Dryden Zoning Ordinance Clarifying The Town’s Prohibition Of Natural Gas Exploration And Extraction.” This document may be viewed at <http://dryden.ny.us/information/town-of-dryden-minutes> .

On August 10 2011, the Ulysses Town Board (Council) unanimously passed a Resolution Adopting Local Law No. 2 Of 2011, “Clarifying That Natural Gas And/Or Petroleum Exploration; Extraction; Support Activities; And The Storage, Transfer, Treatment Or Disposal Of Natural Gas And/Or Petroleum Exploration And Production Wastes Is Prohibited In The Town Of Ulysses.” This document may be viewed at <http://www.ulysses.ny.us>.

On September 12 2011, the Danby Town Board passed a Resolution adopting Local Law #3, “Amending and Clarifying the Town of Danby, Tompkins County New

York, Zoning Ordinance to Prohibit Gas and Petroleum Mining and Related Activities.” Information online: <http://town.danby.ny.us>.

Newly protected waterways

A look at the accompanying map helps us to better understand what these actions signify for protection of our water resources. Thanks to these actions, the following waterways are now protected from gas drilling, within each town’s borders:

- The Town of Ulysses contains part or all of numerous creeks that drain to Cayuga Lake, including Bolter, Trumansburg, Taughannock, Willow, Glenwood and numerous other creeks.
- The Town of Ithaca’s creeks draining to Cayuga Lake, in whole or in part, include Indian, Enfield, Cayuga Inlet, Williams, Coy Glen, Buttermilk, Lick, Six Mile, Cascadilla and Fall creeks; Renwick and Pleasant Grove brooks.
- The Town of Dryden’s creeks draining to Cayuga Lake include, in whole or in part, Six Mile, Cascadilla, and Fall Creek with its numerous upstream tributaries including Mill, Mud, Beaver, Virgil and Willow Glen creeks.
- The Town of Danby contains headwaters streams for Six Mile Creek, Lick Brook, Buttermilk Creek, and Cayuga Inlet. Additionally, headwaters streams flowing south to the Susquehanna River include Danby, Miller, and Michigan creeks.

Please Join or Donate to the Network

Joining or donating is easy to do!

MAIL: Fill out the information below, select a donation level, and mail the form with your check to Cayuga Lake Watershed Network, P.O. Box 348, Aurora, NY 13026

PAYPAL: Join via your PayPal account or credit card online at www.cayugalake.org

- I am joining the Cayuga Lake Watershed Network with the enclosed contribution.
- I am renewing my membership with the enclosed contribution.
- Send a gift membership to the person listed below, and send me a gift card to give them.

Name _____

Address _____

Email _____ May we add you to our listserv? Yes No

Please Select the Support Level You Prefer:

- | | | |
|---|--|--|
| <input type="checkbox"/> \$500 Watershed Benefactor | <input type="checkbox"/> \$50 Farm/Small Business | <input type="checkbox"/> \$25 Individual |
| <input type="checkbox"/> \$250 Lake Sponsor | <input type="checkbox"/> \$50 Organization or Agency | <input type="checkbox"/> \$10 Student/Senior |
| <input type="checkbox"/> \$100 Headwater Donor | <input type="checkbox"/> \$35 Family | <input type="checkbox"/> Other _____ |

Thank you for your support!!!

Your Contributions to the Cayuga Lake Watershed Network are tax deductible.



Overall, these zoning ordinance amendments help protect about 65% of the water inputs to Cayuga Lake. Various sources state that the creeks entering the south end of the lake provide that percentage of the total water inputs to Cayuga Lake. This is a stunning achievement! Of course, these ordinances are only a first step on a long and difficult road to protect our lake, the Finger Lakes region, the state of New York and beyond from the under-researched effects of high-impact industrialized gas drilling activities to water, air, lands, communities and ecosystems. To complicate matters, in mid-September a lawsuit was filed to try and overturn Dryden's ordinance amendment.

Not yet complete

Also to be kept in mind, with another glance at the map, is that protection of even these Tompkins County waters is not complete. For example, the City of Ithaca gets its water supply from Six Mile Creek. While the towns of Dryden, Ithaca and Danby have passed ordinances protective of this water supply, Caroline has not yet done so – and the central portion of Six Mile Creek passes through Caroline. It takes the conscious actions of numerous local governments to protect an entire watershed.

Further, the map shows us that the Tompkins County towns of Enfield, Newfield, and Groton hold the keys to protection of the upland headwaters of many of the creeks that drain to Cayuga Lake. Several of these headwaters streams are outside of Tompkins County, in adjoining counties. Along the northeastern edge of Tompkins County, the Town of Lansing – which has yet to take action regarding potential gas drilling activities there – is home to the heart of the majestic Salmon Creek drainage and many other creeks, large and small, that drain to Cayuga Lake. For more information about strengthening local laws: <http://www.cedclaw.org>.

Gas lease maps available

Geologists state that Lansing and other towns northwards on both sides of the lake are unlikely to yield productive gas wells in the Marcellus Shale formation because the shale's decreasing depth in this area prevents effective fracking. This statement of geologic fact is contradicted by the proliferation of gas leases purchased by energy companies on properties in Lansing and in Cayuga County to the north. A map of leased properties in Tompkins County can be viewed at <http://tcgasmmap.org>; a map of the gas leases in eight Finger Lakes counties can be viewed here: <http://www.citizenscampaign.org>. A newly-issued map of Cayuga County's leased properties is available from Terry Cuddy of the Cayuga Anti-Fracking Alliance, terrycuddy@me.com (this map updates Cayuga County lease information on the Citizens Campaign map). Concerned about leasing issues? Check out <http://fleased.org>.

Congratulations and thanks are due to the Town Boards of Ulysses, Ithaca, Dryden and Danby for these pioneering protective actions. While members and supporters of the Cayuga Lake Watershed Network may think we can now rest easier, you are urged to consider what actions you can take to strengthen these water quality and watershed protections county-wide and beyond. 🐾

Thanks to Karen Edelstein for her skill in making this wonderful map of Tompkins County's towns, creeks, watersheds and lake. She can be contacted at karen.edelstein@gmail.com .

Cayuga's Uninvited Guests: Hydrilla and the Asian Clam

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Information and what you can do

Here at the Cayuga Lake Watershed Network, we are part of the rapid response Cayuga Inlet Hydrilla Task Force to monitor the Hydrilla invasion and support much-needed aggressive counter-measures being developed to prevent it from spreading into the south end of the lake by next spring, and northward toward Mud Lock and the Great Lakes. A "must" for all boaters are clean boating practices: boats moved from one waterway to another, or even from one dock to another, need to be cleaned and closely inspected for any signs of this terrible pest.

We have posted some information at our website about identification of Hydrilla. A better source is online at Cornell Cooperative Extension's website: www.ccetompskins.org/hydrilla . Sharon Anderson is the go-to person there for this and other emerging issues: ska2@cornell.edu.

The Asian Clam Task Force is conducting further dives this fall and determining best actions to protect Owasco Lake from a wider infestation. It behooves folks along Cayuga Lake to look for any signs that this pest has spread to our shores. For more information on identification, locations to date, and what you can do, go to the Owasco Watershed Network, <http://owascolake.org>. A phone number is provided, and a survey form is available if you want to report any sightings of the Asian Clam. (Note: while you are at the portal to learn about Asian Clam, have a look around at this wonderful new information resource about Owasco Lake and its watershed!) 🐾

UPCOMING EVENTS

in the Cayuga Lake Watershed

OCTOBER, DATE TBA:

Community Conference on Invasive Species and Climate Change, to be held in Ithaca NY. Watch our website www.cayugalake.org, listserv, and Facebook page for date, time, location and speakers.

DECEMBER 3:

Ithaca Alternative Gift Fair, 10 am - 6 pm, to be held in the community spaces of the churches around DeWitt Park. The Cayuga Lake Watershed Network hopes to take part again in this great event: Purchase gift cards for friends and family, donating to the organizations of your choice. Online at www.ithacaaltgiftfair.org. 🐦

Please send details about interesting upcoming events in the Cayuga Lake Watershed to steward@cayugalake.org.

The Mission... *The Cayuga Lake Watershed Network identifies key threats to Cayuga Lake and its watershed, and it advocates for solutions that support a healthy environment and vibrant communities.*



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