

Oneida Lake Association

PO Box 3536 Syracuse, NY 13220-3536 info@oneidalakeassociation.org

Greetings!

Your Board of Directors wishes that you, your family, and friends have the best of Holiday Seasons!

WHAT'S UP?



With waterfowl season closed on December 10, and the lake level too low for launching most boats, many of you are awaiting ice-up. Some walleye are still scattered along the shoreline chasing shad and gobies, but most are moving to deeper waters. One can only hope that weather cools consistently and safe ice forms for hard-water angling.

The Town of Cicero is lead agency for SEQRA project that would convert the Lakeshore Marina. By 2020 a developer proposes to complete the construction of sewers and 248 apartment units, ~60 covered garages, 1.25 parking spots per unit (mix of driveways and parking lot), an HOA to govern lawns, snow, outdoor storage; marina

improvements including new docks, seawall, concrete boardwalk around marina, and gated access road connecting Beach Road to Lakeshore Road (moving curb cut 150' east on Lakeshore, away from Mud Mill). Old marina basin (same size as new marina basin) would be rebuilt with sheet piles and concrete piers instead of the current sloped bank/wood docks. (*This action is being followed by OLA's Board of Directors and concerned Members. The OLA Board plans to draft a letter to present its position to the Cicero Town Board.*)



Pay your dues, and HELP PROTECT ONEIDA LAKE!!!!

CICERO SWAMP

In today's lexicon, *draining the swamp* has taken on new meaning. For years in the19th century the words were integrally associated with improving agriculture and health. In the last century it meant rural and suburban development and advancement of our national infrastructure for energy, transportation, and commerce. These goal put the swamp in Washington as EPA and Corps of Engineers Clean Water Act measures were promulgated and expanded.

Within those regulations "wetlands" is a term that embraces not only a **swamp** (soggy, fertile ground with trees), but also a **marsh** (treeless, wet ground dominated by grasses), a **fen** (peat-forming wetlands that receive nutrients from sources other than precipitation: usually from upslope sources through drainage) and **bogs** (spongy peat deposits, acidic, low nutrient waters and a floating floor of sphagnum moss). Bogs receive all or most of their water from precipitation rather than from runoff). Wetlands of one type or another are generally associated with **riparian** (stream), **lacustrine** (lake), or oceanfront systems; all "waters of the United States." As such, today's restrictions would prohibit or substantially inhibit us from building much of what we today rely on. Building in a wetland requires "dredge" or "fill" as defined by federal law.

A current case is Cicero's proposed Lakeshore Marina Apartments. As an example of a facility unlikely to be repeated or enabled in modern regulations, Canastota's muck farms were created by swamp draining and *excavation* of what is now Canaseraga Creek into Lakeport Bay. Chittenango Creek was thus bisected in the early 20th century. Mud Creek starts near Taft Road and runs behind Great Northern Mall to the Oneida River. Its wetlands were filled to create commercialization of Northern Blvd, PennCan Mall (Drivers Village and nearby strips, Hamiln (Clay) Marsh housing encroachment, and Rt 481.

Knowing that many of you drive through Cicero Swamp regularly, on a road that today would be unlikely to be built, we hope that you enjoy this guest article by Mark Cregg.

Soil strength can be determined from the blow count obtained during subsurface explorations. The blow count is the number of times a hammer strikes the top of a soil sampler to drive it 1 ft. into the ground. To a depth of 50 ft., the soil sampler required no blows. Just the weight of the hammer resting on top of the sampler was enough to push the sampler down into the ground. This "weight of



Rattlesnake Gulch by Mark Cregg

Rattles nake Gulch – the name its elf sounds ominous and foreboding, conjuring up images of deadly dangers lurking all around. Fortunately, it's not really like that Or is it? Well, let's take a dos er look at that.

Anyone who drives NY Rte 298 through the area on a regular basis knows that one of the perils is the flooding encountered on the road. It is often partially or fully closed after periods of prolonged rainfall and/or quick snow melt. Unfortunately, there are no other State roads through the area, so closures result in inconvenience for area residents and commuters. Why does the flooding happen? Why can't NY State do something about it, such as raising the road several inches so that the road won't be affected by the water? Those are good questions that we'll be exploring.

First of all, the name "Rattles nake Gulch" does not appear on any maps. So, how did this area get its name anyway? I'm sure there are stories out there but no real facts that I could find. I can only surmise that it had something to do with the rattles nakes that live there. Yes, rattles nakes actually live in the Cicero Swamp. This is one of only two locations in New York State where these rattlers live. They are called Mass as auga and are sometimes erroneously referred to as pygmy rattlers, probably because they rarely reach three feet in length.

The Cicero Swamp is a very large, shallow body of water that is also filled with trees and other vegetation. Since it is a low-lying area, most everything (creeks, rain runoff, snow melt) drains into the swamp. A prolonged rainfall or quick snow melt will rapidly add a lot of water into the swamp in a very short time frame. This causes the water level to rise above its normal level and encroach upon Rte 298. It's like trying to drain a bathtub with the hammer" soil has little to no strength. These loose soils are also under artesian pressure, which creates further instability. This soil just can't support much weight. If you were to step off the road and wander into the swamp, you might be supported by the root mat of the vegetation or you might completely sink. The soils are that bad! The bridge over Taylor Commission Ditch had to be supported on piles driven to hard material approximately 80 ft. below the surface.



Why can't the State raise the road up to eliminate or reduce the flooding problems? In simple terms, the road is "floating" on top of the poor soil deposits similar to the way that a raft floats on top of water. Any attempt to add more weight to the road bed would accelerate settlement. Even worse, the soil could fail. What does that mean? As an illustration. picture Jello that has been taken out of its mold and put on a table. Place a small flat weight, like a small bowl, so that it sits on top of the Jello. Add some weight to the bowl and it will start to sink into the Jello. If you add too much weight to the bowl, it will cause the Jello to split apart and the bowl will fall right to the bottom of the Jello. Soil can fail in the same way if its weight bearing strength is exceeded. In this area of Rattles nake Gulch, the soils have little to no bearing strength, so a soil failure is a very possible outcome from placing additional loads on it. Unfortunately, that means that there are really no good ways to be able to raise the road.

So, if there are all of these geotechnical problems associated with this area you might wonder how in the world the original road was constructed. My simple answer is: a plank road. This was a rather ingenious method used in the "olden days" to bridge over areas that would normally not be traversable. Cut wooden planks or logs were laid side by side transversely across the desired road path. These logs or planks would act like snow shoes for the road to keep it from sinking. Then other building material – soil and/or gravel – were placed on top of it to provide a riding surface. water on full blast and the drain only partially opened. The tub fills up quicker than it drains. Only after the water is turned off does the water level in the tub start to go down.

Soil investigations taken for the Rte 298 bridge over Taylor Commission Ditch (pictured below) provided a challenging soil profile. Below the roadbed gravel is a 3 - 4 ft. layer of sand, underlain by a 4 - 5 ft. layer of peat and muck (which are decomposed vegetation), underlain by alternating layers of very loose fine sands, silts, and very soft clays to a depth of 50 ft. For those not familiar with soil terms, silt is a very small grained soil, that in its dry condition, looks and feels like flour. Individual silt particles range in size between 0.002 - 0.05 mm. The particles would be similar in shape to sand. In a wet and loose state, silt has very little strength.

Clays, on the other hand, are formed from thin plate-shaped particles held together by electrostatic forces. This gives clay cohesion a stickiness. Individual particle sizes are less than 0.002 mm. Because of their size, shape, and the electrostatic forces, clays hold onto water trapped in the voids between the particles and don't allow it to pass through, making them impermeable. Clay has many beneficial uses. In a completely dry state, day is quite strong. Pottery and bricks are examples. Because it is impermeable, day can be utilized to keep water in a confined space. Farm ponds are an example. Elevated portions of the Erie Canal were built with a day liner to keep the water within the channel.

However, as a foundation for roads, bridges, buildings, etc. in its natural state, day is completely undesirable because of stability and settlement concerns. Clays are subject to long term settlement (possibly decades) when a load is applied. The Leaning Tower of Pisa is a very well-known example of what can happen when building something on a clay foundation.



New York State did not originally build this road. Therefore, there are no recorded construction plans to know for sure how it was built. My belief that this is a plank road is based on several things. First of all, when this road was originally built sometime in the early to mid-1800s there really wasn't any other way to cross such a vast wetland. The above image was taken from an 1859 survey of Onondaga County and shows the road crossing the swamp at the time of the survey. While I don't know exactly when this road was built, I do know one thing: This road has been here a long, long time!

Secondly, over time, wet and dry cycles cause the wood to rot and can create an uneven riding surface resembling a washboard. This happens because of the uneven deterioration of the wood. As the wood rots, it loses its strength and settles into "low" areas. Adjacent areas may not rot as quickly, keep some of their strength, and remain as "high" areas in the road. This "washboard effect" can be observed along stretches of this road.

Thirdly, the soil investigations mentioned above encountered wood just below the gravel beneath the pavement. It's assumed that this wood was part of the plank road system. In addition, a construction project to replace two culverts a short distance north of the bridge made an interesting discovery. When the original culvert was removed, it was found to have been sitting on perfectly preserved thick wooden planks. (See adjacent photo.) The planks hadn't deteriorated because they had been continually under water. The water level was lowered s o that this construction work could be accomplished.

So, is Rattles nake Gulch as dangerous a place as the name might suggest? Let's see – rattles nakes, narrow road through a very large swamp with water all around, possible flooded road conditions, and troubles ome subsurface conditions. I guess you'll have to decide for yours elf if that spells potential danger the next time you drive through the area. One person's danger is another person's adventure. Besides, what could possibly go wrong anyway? Famous last words, right? H mmmm......

Note: Mark Cregg was the Regional Geotechnical Engineer for the Syracuse Region of the NYSDOT for over 30 years.



The "Art" of Duck Hunting by John Harmon

Of all of the outdoor sporting pursuits, perhaps none is more "artful" than duck hunting. By that I mean, that duck hunting has a great association with the arts. Sure, there are some fishermen who tie their own flies, and many of these lures can be considered works of art, even masterpieces. And deer hunting has its own artistry in taxidermy. Neither compares, however, to the artistry associated with duck hunting. First, there is the artwork of the annual duck stamp competition. Many of the world's greatest painters compete to have their work chosen to appear in miniature on the annual duck hunting stamp. These magnificent pieces are often acquired for their collector value as well as their hunting value. Even the shotguns that many upscale hunters use are works of art, with amazing etchings on both the stock and on the barrel. Duck calls recently took a spotlight, too, with the wildly popular television series, *Duck Dynasty*. And, of course, there are the duck decoys, themselves.

These decoys, which date back centuries, fall into three general categories. The most popular are the bargain variety, purchased in quantity, with a remarkable resemblance to the real quarry. They are molded and painted to look quite enticing to a flock of passing mallards or canvasbacks. Then there are the antique decoys that are prized by many collectors. These dekes are often clunky blocks of wood, weather worn, with faded paint revealing rudimentary attention to nature's detail. Nevertheless, these antiques have their own Americana charm, in a Grandma Moses sort of way. And then there are the true masterpieces. These decoys are hand carved by talented artists, painted and finished to a stunning degree. These works of art, destined for fireplace mantles or display cases, are never intended to see a lake or a pond. But do the ducks themselves pay attention to all of this art? Maybe not!

I have been blessed with the opportunity to live on the south shore of Oneida Lake for the last 30 years. Lower South Bay is very shallow, so we have to be careful about shoals and outcroppings of rock. In fact, my neighbor to my immediate left has anchored two large, white plastic jugs where the rocks seem to chase boats, jet skis, and paddle boards. And sure enough, these two jugs, about thirty feet apart, attract dozens of waterfowl on a daily basis. They practically yank birds right out of the sky. Canada geese, two species of swans, and several species of puddle ducks all congregate around these two white jugs from dusk till dawn. Every day I scan the bay, and there are only two spots on the water that have clusters of fowl. One is at my neighbor's nav aids, and the other is about ten houses to my right, where there is a similar white jug, anchored to a mooring line. Clearly, these ducks have no appreciation for the arts! Of course, this is not a scientific study, but duck hunters, take note.

ALL WATER MATTERS!

The *Outdoor News Bulletin* reports that the Great Lakes contain 2 0 percent of all surface freshwater on the planet and comprise the world's largest freshwater ecosystem. Invasive bighead, silver and black carp (collectively known as invasive Asian Carp) can significantly alter the Great Lakes ecosystem, affecting the \$7 billion fishery, \$16 billion boating industry and other tourism-based industries, property owners, recreationalists and others dependent on the Great Lakes and its tributaries. A study of options to reduce passage of carp at a key point below the Great Lakes Basin was released in August by the U.S. Army Corps of Engineers (USACE) with final decisions on the selected plan expected in the coming months.

The Mississippi River Basin, which has invasive carp, is connected to the Great Lakes Basin in a small number of

locations. Some are natural connections and some are man-made. <u>The Brandon Road Lock and Dam site in Will</u> <u>County</u>, <u>Illinois</u> is the best known and perhaps most controversial location to establish a barrier to upstream transfer of invasive carp from the Mississippi River Basin. Controversy exists because Brandon Lock is a key transportation element for water-based movement of materials through the Illinois waterway and the most likely pinch point to prevent Asian carp from moving into the Great Lakes. Current efforts, including using an electric barrier system to prevent invasive carp from entering the Great Lakes, occur further upstream, but this system has vulnerabilities and is not 100 percent effective.

The Great Lakes and Mississippi River Interbasin Study – Brandon Road Draft Integrated Feasibility Study and Environmental Impact Statement – Will County, IL (<u>Draft GLMRIS-BR Report</u>) evaluates options and technologies near the Brandon Road Lock and Dam site in Will County, Illinois near Joliet, to prevent the upstream transfer of aquatic nuisance species (ANS) from the Mississippi River Basin into the Great Lakes Basin, while minimizing impacts to existing waterway uses and users. On August 7, 2017, the Army Corp released its Tentatively Selected Plan (TSP) for Brandon Road Lock and Dam.

The report comes less than two months after a live Asian carp was caught beyond electric barriers near Chicago. It was the first silver carp found beyond the electric barriers in the last seven years, with a bighead carp captured near this location in 2010. Additional fishing and sampling found no other carp, however.

Potential actions at Brandon Road, outlined in the TSP, include an engineered channel that will allow for the deployment of technologies to reduce the risk of carp moving into Lake Michigan to the maximum extent possible. Those technologies include: A) a modified electric barrier to reduce the risk of transport of fish, B) complex noises transmitted through the water to deter fish from passing through the lock, C) water jets to flush out fish that may pass through the locks in the space between barges, and D) continued population reduction below Brandon Road with the goal of further reducing the risk of any spawning in this area or of small fish moving through the lock and dam.

Help OLA function. Memorials and contributions to our program are most welcome. OLA is a 501(c)4 organization serving protection of the Oneida Lake environment.

Pay your dues, recruit your non-member neighbors and friends, and HELP PROTECT ONEIDA LAKE!!!!



Ð

Website Who We Are What We Do How to Help

The Oneida Lake Association is a member of the New York State Conservation Council <u>http://www.nyscc.com/</u> and the New York State Federation of Lake Associations <u>http://www.nysfola.org/</u>.

Report environmental violations. Please remember to obey all laws, rules, regulations, and codes of ethics as they pertain to boating, fishing, hunting, and management of Oneida Lake and its drainage basin. Be civil. *1-844-DEC-ECOS* (1-844-332-3267)

Your copy should address 3 key questions: Who am I writing for? (Audience) Why should they care? (Benefit) What do I want them to do here? (Call-to-Action)

Create a great offer by adding words like "free" "personalized" "complimentary" or "customized." A sense of urgency often helps readers take an action, so think about inserting phrases like "for a limited time only" or "only 7 remaining!"