

Ashokan / Pepacton Watershed Chapter of Trout Unlimited Zoom Chapter Meeting Minutes of Wednesday January 27th, 2021

The speaker to be: **Caroline Shafer, NY TU Field Technician**

7:05 pm:

Minutes:

This being our first Chapter Zoom Meeting there was some confusion getting logged on, quite a few including myself as Secretary for APWC TU missed the first 5-10 mins. Consequently, the planned short business meeting was not recorded by me. Thus no former meeting minutes were read.

Treasurer's Report:

Jody had emailed them to me so I'm able to report the status at that time.

The General Operating Balance: \$12,271.07

Conservation Fund Balance: \$ 787.68

Total Cash Assets 12/31/20: \$13,058.75

Mark L. Introduced the Speaker: Caroline Shafer, NY TU Field Technician

Caroline first outlined her education and the work that prepared her for the work she is now doing. She went to SUNY Cobleskill where she earned an Associate's Degree of Applied Science and a Bachelor's in Aquaculture. After college she went on to work for the Department of Education in New Paltz as a Wildlife Technician. Then in April of 2013 she started with Trout Unlimited as a field Technician based in Stamford NY.

Projects:

East Branch of the Delaware: A nine mile long stretch, from Roxbury to Middletown caused concern, because the water temps had increased, affected by a dam in Middletown. The dam had little or no riparian vegetation.

They wanted to understand the potential challenges to the east branch, the intent being to reduce potential impacts and increase the wild trout population.

Their efforts included: monitoring trout movement through the area, temperature monitoring. Assessments using NAACC stream assessment protocols which include most or all a streams variables at any given time. They also went on to do riparian plantings. Monitoring trout movement through the area required RFID units involving setting up of instream antenna and maintenance of same. The RFID units themselves that ran off of two 12V batteries that were to be kept charged by solar panels. They also set up frequency tuners to insure they were picking up tagged trout as they passed. All of which required monitoring and maintenance. The next step was to tag the trout. They started first at the hatchery to be monitored and then went on to wild fish in stream where they were going to set up the RFID units, which was accomplished by electro fishing. The tags are inserted in the trout's body cavity and remain there until they are caught.

Mark L. asked how large the fish were that they were tagging.

Caroline indicated that any trout over 150 millimeters were tagged.

Caroline went on to say they also did more electro fishing looking for the presence or absence of trout as well identifying sites that had potential for gathering sufficient information to place additional RFID units.

Caroline indicated that part of what she did was to enact NAACC protocol, as mentioned before, which stands for North Atlantic Aquatic Connectivity Collaborative. She went to say the protocol was basically to assess road stream crossings and giving them a score as far as Fish and Wildlife pass ability. The determinants are culvert inlet and outlet size, effect of abutting banksides all to determine if the crossing in question is a barrier for fish, the information collected is entered into a NAACC form for analysis.

Caroline went on to say they did temperature monitoring and trout passage through RFID sites notation which was downloaded at the end of the year, at which time she would analyze it to come up with an understanding of what was going on in the stream. Looking at the data you can see the tag number, unique, to each fish. When tagging they recorded type of trout, where it was tagged, and its weight. So when a fish swam through any RFID they would know where it came from, which fish it was, and how the present data compared to the data recorded when it was tagged.

Regarding temperatures they were automatically read every hour of every day. A look at 2019 the temps look high and were but the important take away for them was the temperature at the Dam which is what they were most concerned about. The temps downstream of the dam were high also but they helped identify tributaries that were thermal refuges for the trout during hot summer periods. An average temp of sites below and above the dam showed that above the water temps were significantly cooler.

Caroline further noted that the Batavia Kill was the biggest trib. So they targeted that to monitor, but saw practically no fish, though they knew they were there. She indicated that their equipment was giving them trouble all summer and that they would have done more tagging but it was hard to get people together to do that kind of work.

This project from 2018 to 2019 tagged a total of sixteen hundred fish. Some were stocked and some were wild and they were at various sites. She next indicated how much some of the fish moved. Upside of the dam near Kirkside they saw fish that were tagged below the dam. Another fish that moved quite a bit was from one stocking site below Meeker Hollow and traveled downstream first but decided to go up a tributary and found a waterfall as refuge; he had traveled 50 miles or more. Quite a few fish moved upstream to the Batavia. It seemed that stocked fish went to the Batavia and Wild went to Kirkside. This was the summer so all were seeking cooler temps and many traveled substantial distances.

Caroline indicated that she would take questions before moving on to what TU has been doing in other areas.

An Attendee: asked if she knew what percentage of the trout tagged were wild or stocked.

Caroline: said she did not know but could find out for him, he declined.

Same Attendee: also asked if Caroline knew what this stretch of the EB was going to be designated in the new DEC regulations?

Caroline: Indicated she was not certain but believed it was to be stocked with Brown Trout.

Mark L: What asked the farthest distance a trout traveled, according to her data?

Caroline: consulted her data and came up with a fish that had traveled all the way up from the dam (Pepacton) but was unusual in that he passed by the Batavia, a thermal refuge that would be the typical reason for a trout traveling that distance.

Peter M: Going back to the stocked question said he was pretty sure that the DEC stocked from Margaretville all the way up to Roxbury, and that they stocked at every single bridge and added that the practice was not likely to change.

Peter Gagen: Said the dam is having an effect on the river and that in turn on the trout population. He went on to say that he knew it was mentioned that this was an historical dam but added that further east of this area, on several rivers, historical dams are being removed. He went on to ask how the owner can be persuaded to remove that dam to preserve and return the river to a natural flow to the benefit of the trout and anglers. He mentioned algae growth and manure dumping by a farmer up stream as well.

Caroline indicated that they had looked into some measures to mitigate the problem of the dam and lake, one being to create a by-pass waterway around both and a second to remove the dam. They had also talked to Jim Kelley, the owner of the dam, but found any dialogue slow going. The goal of the DEC is to keep everyone happy, so they at TU are trying to figure what works for the Town, and the owners. They do have a bridge below the dam making stream crossing a non-issue for the Town.

Peter Marx Entered the conversation saying that this is something that he Lennie Millen and others had advocated for in the past but research had revealed difficult issues to overcome. He said a big hurdle is that the dam is privately owned and constructed in compliance with all safety regulations of the state of New York. Additionally the owner, Jim Kelly, has a Kayaking business as well as a Bed and Breakfast that relies on the lake.

Mark L. mentioned that he thought there was a great deal of support for the lake by the property owners that live around the lake making it a community issue and political issue.

Peter M. said that it probably would be though there are no property owners that are right on the lake. They are a little uphill giving them a scenic view of the lake.

Mark L. said he thought they did consider it a community resource and additionally the Kayaking business was prominently featured in an "I Love NY" ad campaign.

Peter G. suggested there might be a political solution. Which was to put pressure on the property owners to see the dams' removal as in the greater good for many more people?

Mark L. offered that it sounded like a good job for Peter to tackle.

Caroline went on to describe other work they had done, which was all essentially culvert repair/replacement or restorations of stream flow channels. The additional people involved in these projects are: **Tracy Brown** in our area, **Joann Humphries** a stream restoration specialist, and **Steve Swanson** DEC Region 4 aquatic ecologist. Helped by civilian funders, designers, and engineers they had restored the natural flow of several streams as follows:

Caroline started with Horse Brook in Sullivan County, displayed in a slide, which was an antiquated double culvert presenting a barrier for trout movement. They replaced the old culverts with a single span bridge eliminating the barrier to reconnect two point three miles of trout habitat of this tributary to the Beaverkill which is now high quality spawning habitat. Besides helping the ecological function of this stream it also reduced flooding and potential maintenance issues for the Town of Colchester.

Another Project described was **Green Brook** where the streams course had been reduced to a small culvert which had subsequently collapsed. The team carved out a new path the banks of which were stabilized by log piles. Before this restoration the upstream side of the culvert had become all but stagnant wetland. There were trout above the obstruction and now that the problem has been mitigated there is every reason to believe that the trout will repopulate the downstream side.

Caroline presented slides of teams, with community volunteers, working at riparian plantings on the Hudson River. They planted about 16 hundred plants along 2.5 miles of river. These provide structure that stabilizes the stream banks and also helps filter out sediment and provides habitat for fish and other wildlife. Additionally it gets the community engaged with other volunteers and chapter members.

Caroline presented slides of their use of logs and branches from tress either down on the site or felled by them. They also used root balls and stones to create buffers that stabilize the path of a stream and more importantly its banks. Though not entirely water proof they prevent flooding and bank over run as well as bank erosion. This is a cleverly organic solution that's good for macro-invertebrates and gives trout habitat and cover. Additionally it serves to slow the river down some further protecting the banks from erosion.

A Future Project described is proposed in Downsville is to be about eleven hundred feet long. The problem there, being a lack of flood plain connection. Caroline showed a slide of the area with barely any habitat or cover. The Town mowed along the area as part of a walking path. In response to the last two floods the Town tried to stabilize this unusually high embankment with rip rap and other material. Now if you walk the stream one can see these remedies are failing and material is falling into the stream, above the bridge there's a house at risk of sliding into the stream. So there is a lot of work to be done there.

What they propose to do first is install temperature sensing fiber optic cables in the stream bed to monitor temps and to locate spots where ground water is upwelling; saying an unusually low temp reading repeatedly at a given spot is a good indication of the presence of groundwater. They would then put a bench in the steep and long drop embankment to break it up and then plant appropriate vegetation to cultivate natural growth providing shade and cover as the stream has been determined to have rising temps.. This is a future project that they've yet to get consensus on from the interested parties.

Caroline went on to suggest other ways of getting chapters and communities involved. She promoted a smart phone app called "The Rivers App" as it can open one's eyes to potential projects in our area. The app, when it's enabled to include TU data, enables one to identify and describe in text and photos the problem they see, and the app gives one options to choose from, and convey the info to the public. It gives TU an idea of trouble spots they can target but also to convey the state of an area to other anglers. Caroline mentioned that one of her coworkers had put together a little tutorial on the use of this app if anyone was interested.

Caroline at this point indicated that future seemed unclear with COVID still a danger, but she hoped to get some tree planting, as well as fiber optic cable laying, outings organized in the near future, following all protocols of course.

At this point Caroline solicited questions.

Mark L. mentioned that in the credits there were a number of funding agencies and sources, he further asked who organized funding and asked it was her. **Caroline** replied that it was **Tracy Brown** and **Steve Swanson** who organized funds and subsequently sent her out to the field to implement plans. Furthermore she noted that Tracy and Steve did an outstanding job with regards to fund raising and public relations.

Mark L. mentioned that Tracy was supposed to speak as well that night but couldn't make it, and went on to suggest that she could be a good source with regards to future speakers. Mark went on to ask if there were any more questions.

Peter G.: asked about a project on the Plattekill just above where route 28 meets route 30? Caroline responded that it was not a project of theirs but that she'd seen it and perhaps Peter M. would know.

Peter Marx indicated that it was the **Delaware County Soil and Water Conservation District** funded by **NYC** who in his opinion butchered a little stream in Roxbury called Pleasant Valley Run and is a native Brook Trout stream. It's the lowest part of the Plattekill and only a quarter mile or so down is the reservoir, so they didn't butcher that much of the stream.

Mark L. mentioned that in our chapter's shocking with the benefit of a NYS group, of the **Ox Clove** a small mountain feeder just across the street from him, they were amazed at how many small fish are in these streams. This stream is very rural and others more urbanized, but he still thought one would be amazed to know how many fish inhabit these waters.

Tony Cocozza registered surprise that when he went to SPDES permit meetings, Dave Burns who does a lot in Greene and Delaware counties and seems cognizant of trying to protect the water as they improve it, just went in there sort of carelessly. It's something to keep an eye out for.

Peter M. said they did go in there and take out features good for trout like berms and curves that create good pools and basically just straightened it and were planting it sparsely. He went on to mention Mark's earlier question of funding, and said that he knew that **Tracy B.** got funding for some of the Delaware River projects through the "Fish and Wildlife Service Program" that is funded by "Congress". He said they get some partners that put money into that too, and he believed that was where the bulk of the money came from.

Mark L. mentioned that there was money available from TU National's Embrace a Stream Program. He added that the State Council had a pretty big bank balance too, so there is money available for some of these projects. Mark went on to say that our chapter had participated with the tree planting on the EB three years in a row but we don't know when we'll be able to continue with some of these very important activities that we have on the table, but we will when we can.

Mark asked if there was anything else for **Caroline**.

Ed Myer said he did and that he was from the **Catskill Mountain Chapter**. He asked if Caroline knew of any projects that have been planned for the Esopus Watershed, any migration barriers that she was aware of. She replied she did not, that they had not been able to get there yet.

Ed M. said that now that the Esopus has been designated as a Wild Trout Fishery we have to rely on wild propagation. He said he would like to look at all of the tributaries to see if any more habitats for wild trout propagation could be opened up.

Mark L. indicated that he thought there would be opportunities there. He added that he was very excited about turning the Esopus into a wild fishery. He mentioned that our chapter did support this initiative by weighing in early and often with the DEC. He went on to say that he didn't know if it would improve fishing in the coming year but he, personally, was thinking that in two, three, maybe four years this is going to be a monster Wild Rainbow Trout fishery.

Mark L. then asked if there were any more questions or comments for **Caroline**.

Pat thanked Caroline very much for her presentation and the important work she did and added that it was much appreciated.

Mark L. then remarked that Pat was a former President of the Catskill Mountain Chapter and was one the people that initiated this meeting sharing of chapters. Mark suggested that this was one way to interact with our sister chapters that we haven't seen before and posited that there might be some advantages to this new zoom platform. It's not quite the same as our in person meetings, especially on the stream for our fishing outings. He added that there were 23 participants, more than we often had at in person Chapter meetings.

Mark L. mentioned that Ulster County had a high rate of COVID cases and recommended caution. He also mentioned the Chapter BOD meeting the next Tuesday. He also thanked **Caroline** as did many participants enthusiastically.

Respectfully submitted,
Thom Frankel