



# ANNUAL NEWSLETTER

## SALMON RIVER WATERSHED

### 2018

### A Good Ol' Fashioned River Clean-up



#### A River Clean-up.....

Sometimes river protection means donning work gloves, filling trash bags and leaving behind a cleaner, safer streambank. This last fall as part of CT River Conservancy's annual "Source to Sea" Clean-Up, CME Associates and the UCONN Soil & Water Conservation Club partnered with the Salmon River Watershed Partnership and the Town of Colchester to clean up around the commuter lot at the RT 2-Rt 149 intersection and along the Jeremy River banks adjacent to the Airline Trail.

This site is just upstream of where the Norton Mill Dam was removed last fall. So it seems only fitting that a "River Restored" is also a "River Worth Cleaning."

#### What we Collected

- \*1 mattress box-spring
- \*8 tires
- \*201+ plastic bottles
- \*110 glass bottles
- \*56 aluminum cans
- \*52 fast food items
- \*1 carpet
- \*9 articles of clothing
- \*12 bags of garbage
- \*2 batteries
- \*42 single-use bags
- \*313 other plastic
- \*33 nippers
- \*63 Styrofoam cups
- \*8 diapers
- \*5 pharma./syringes
- \*2 pieces of furniture
- \*1 computer
- \*16 street sweeper bristles

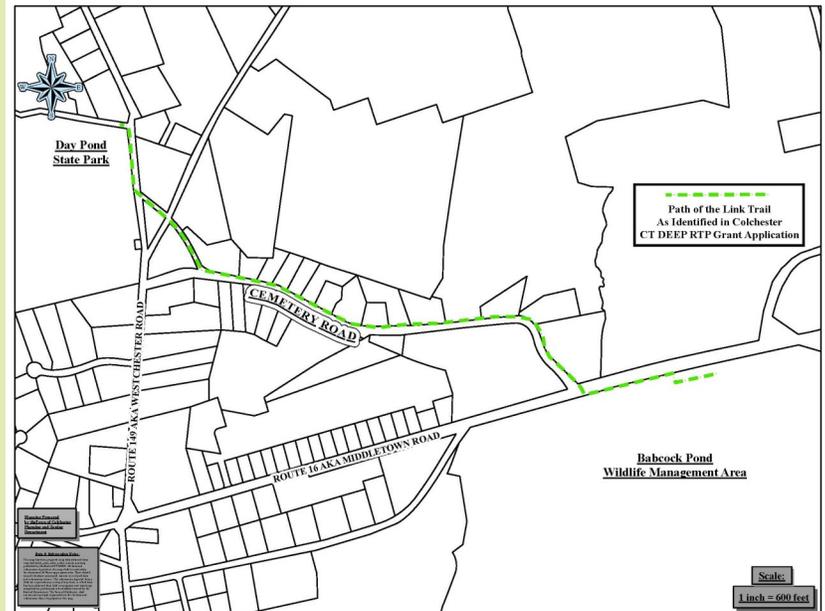


## The Missing Link in Colchester

In 2015, the Town of Colchester applied for and was awarded a grant from the CT DEEP Recreational Trails Program. Colchester's application, was for the design of a smaller pedestrian trail that would link two larger trail networks. This connection, once implemented would provide a 90+ mile contiguous network of pedestrian trails, beginning in East Lyme, CT and ending at the Massachusetts border in the Town of Thompson, CT. The proposed connection trail would join the Richard Goodwin Trail\*, which begins in East Lyme, goes through Salem, Lyme and currently ends East Haddam. A second phase in the draft plan would extend up through Devil's Hopyard and following dirt roads ending at RT 16. As part of the second phase there would also be a connection from Day Pond State Park up through Salmon River State Forest to the Airline Trail. The missing link would connect RT 16 to RT 149. The proposed new trail has been named the "Link Trail".

The Link Trail would meet up with the Richard Goodwin Trail, at a point just north of the Babcock Pond Wildlife Management area, on the south side of Route 16. The link trail is proposed to cross over Route 16 at the Cemetery Road intersection, and continue north/northwest on the east side of Cemetery Road. The trail will cross over Route 149 at the Church Street intersection and into Day Pond State Park. (see figure to right)

The town's awarded grant is for the conceptual design of the "Link Trail", to ensure that the trail would be physically possible for pedestrian use. The conceptual design entails a complete survey of the project limits, the design/layout of the actual trail within the public ROWs and conceptual approval of both crosswalks (Route 16 & Route 149) from CT DOT. If, through the implementation of the Town's awarded grant, it is determined that the trail can be installed and safely utilized, the town would then intend to apply for a second grant from the CT DEEP sponsored Recreational Trails Program, to construct the Link Trail and the crosswalks. At this point, the town and its consultants are working with CT DOT to ensure the crosswalks can be safely installed.



In addition to the design of the Link Trail, Colchester's awarded grant includes another component, to promote the use of trails in Connecticut. To accomplish this, Colchester has partnered with the Chatham Health District and is working to develop a number of guided hikes on June 2, 2018, National Trails Day. There will be a total of six (6) guided hikes, one in each town of the Chatham Health District (Colchester, East Haddam, East Hampton, Hebron, Marlborough and Portland). Once available, the guided hikes will be listed on the Town Colchester's website, the Chatham Health District's website and with the CT Greenway Council in the weeks leading up to National Trails Day.

*By Jay Gigliotti*

**\*Maps for the completed Goodwin Trail can be found at [www.eightmileriver.org](http://www.eightmileriver.org)**

## Our thanks to.....

The efforts of the Salmon River Watershed Partnership would not be possible without the support of many volunteers, the watershed towns and local businesses and organizations. Special thanks to...

**GZA GeoEnvironmental Inc., CME Associates, Goodwin College UCONN Soil & Water Club, Ken Geisler, CT River Coastal Conservation District, Department of Energy and Environmental Protection, The Nature Conservancy, Society of Women Environmental Professionals, USGS, Mystic Aquarium and Moodus Sportsmen's Club**

## ***Last Major Dam Removed for Fish Passage\****

The Blackledge Dam Removal and Restoration Project on the Blackledge River in Glastonbury and Hebron began in early February 2018, with the breach occurring on February 13<sup>th</sup>. The earthen and masonry dam, constructed in the 1800s, is located: some 500 feet north/upstream of Hebron Avenue/ Route 94; and within Glastonbury's Blackledge Falls Park on its west side and the Meshomasic State Forest on the eastern, Hebron side.



*Looking north/upstream through the notch made in the dam at the incised channel in the accumulated pond sediments; note the temporary stone armorment of the banks for protection from high flows from February's rains.*

This project is totally funded by the Town of Glastonbury and is a mitigation project resulting from an earlier project involving the placement of standard riprap along a section of the Connecticut River's side channel in order to counteract a localized slippage of the riverbank. The project manager is Glastonbury's Town Engineer Dan Pennington, and Stephen Gephard from the CT DEEP's Fisheries Division is providing guidance during the construction and restoration processes. Completion is earmarked for the end of June 2018. The site contractor performing the work is Sochocki & Son, Inc. of Preston, CT, a contractor that specializes in such projects and other marine construction.

The main objectives of the project are to remove the physical barrier to fish movement in the river, create a stable river channel, and provide favorable finfish habitat. The major components of the project involve:

- Removing a 70-foot long section of the up to 8-foot high masonry dam;
- Creating a temporary bypass diversion of the river's flow around the work area;
- Establishing a 14-foot wide, low-flow channel and an up to 30-foot wide bankful channel for a length over 200 feet within the accumulated pond sediments upstream of the dam;
- Stabilizing the created stream banks, along with other exposed disturbed soils areas, with rock, boulder and log revetment techniques, and plant materials (live stakes, tuberlings, seedlings, seed mixes and the existing native seed within the exposed, undisturbed sediment deposits);
- Utilizing boulders, stone, logs and plantings to provide additional, meaningful structure in order to complete the restoration and re-establish the riparian corridor.



*Looking northeast along the construction access to the drained pond where heavy timber mats were placed to facilitate heavy equipment access; the tree line in background was the pond's east shoreline located in Hebron.*

The Blackledge River is a tributary to the Salmon River and Connecticut River. This dam is the last major dam in the watershed that blocks fish passage (Leesville Dam on the Salmon River has a fish ladder). Its removal opens up 2 more miles upstream for fish passage, resulting in over 26 miles of mostly free-flowing conditions important to fisheries resources.

\* Leesville Dam near the mouth of the Salmon River remains, but is outfitted with a fish ladder to provide passage

By *Thomas Mocko*



### ***Borrowing Land from Our Children:***

**In Support of Land Conservation: Our decisions today impact our children, their children and their children's children. Local land conservation efforts in the watershed mean your grandchildren will have clean water to drink and a chance to explore nature. Your vote and dollars show you care. Email us at [salmonriverct@att.net](mailto:salmonriverct@att.net) and we will connect you to a local preservation group.**

## Hebron News!

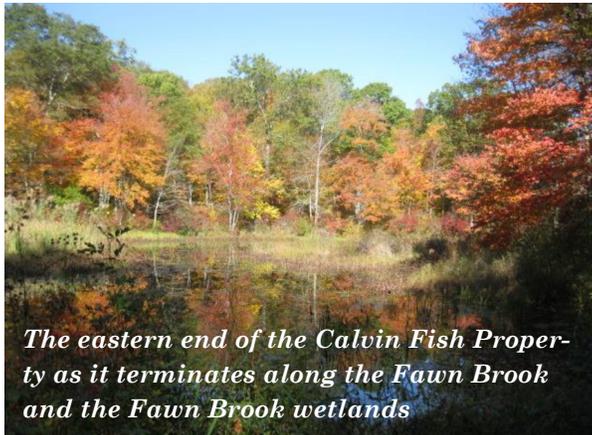
### Gracious Open Space Land Donation

In August 2017, the Hebron Open Space Land Acquisition Committee recommended acceptance of a gracious 20.2-acre donation of land from the Alpert, Fisher, Goldstein and Rosenbaum families. In December 2017, the town approved this open space donation offer. The donated property preserves an extensive scenic, forested buffer between the Colchester Spur of the Air Line Trail and Route 85. The land offers an opportunity for additional Trail parking and potential picnic area. The parcel is comprised mostly of woodlands and wetlands up-gradient to Raymond Brook Marsh, a Wetlands of State-Wide Special Concern. Also, a portion of this property lies within the State's Natural Diversity Data Base map, showing an area of State and Federal Listed Species and Significant Natural Communities.

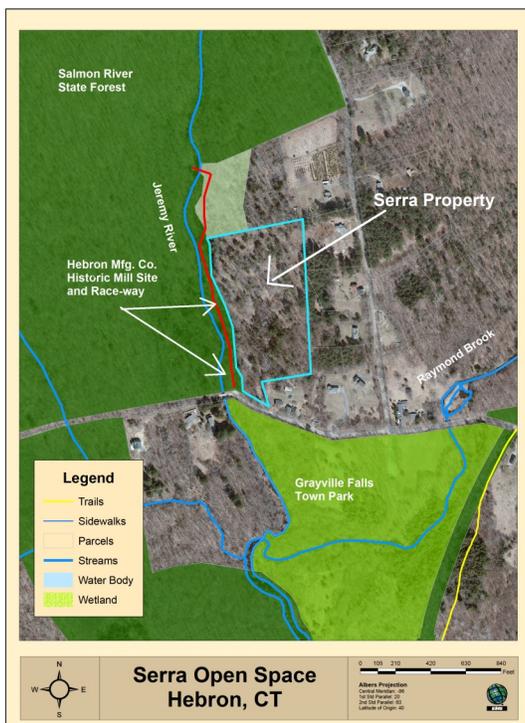


### Two Hebron Open Space Acquisitions Protecting the Salmon River!

In January 2017, the Hebron Open Space Land Acquisition Committee voted to recommend a 47.5-acre open space purchase of the Fish parcel located on Gilead Street abutting Gilead Hill Elementary School for \$175,000. The parcel, located within the Fawn Brook Greenway, has a number of unique attributes that the Committee considered in making its recommendation. The property contains a significant portion of Fawn Brook, a Class A watercourse and important tributary of the Salmon River and a portion of the Fawn Brook Marsh, a designated Wetlands of Special Concern. The parcel also contains a trail system that extends to Fawn Brook. An opportunity to connect this trail system to an existing trail at Gilead Hill Elementary School could provide for educational and recreational school use. This recommendation was approved at a Special Town Meeting in August 2017 and in December the town was notified of a State open space grant award covering 60%, or \$102,000, of the acquisition price.



In July 2017, based upon a recommendation from the Committee, the town approved the 10-acre Serra parcel acquisition. This property, abutting town-owned open space, the Salmon River State Forest and the Jeremy River, another Class A watercourse and tributary of Salmon River, includes two trails that extend from Grayville Road to Jeremy River and provides a connection to the town-owned Grayville Falls Park. While protecting the Jeremy River, the acquisition helps preserve an abutting historic sluiceway and mill remnants within the State Forest.

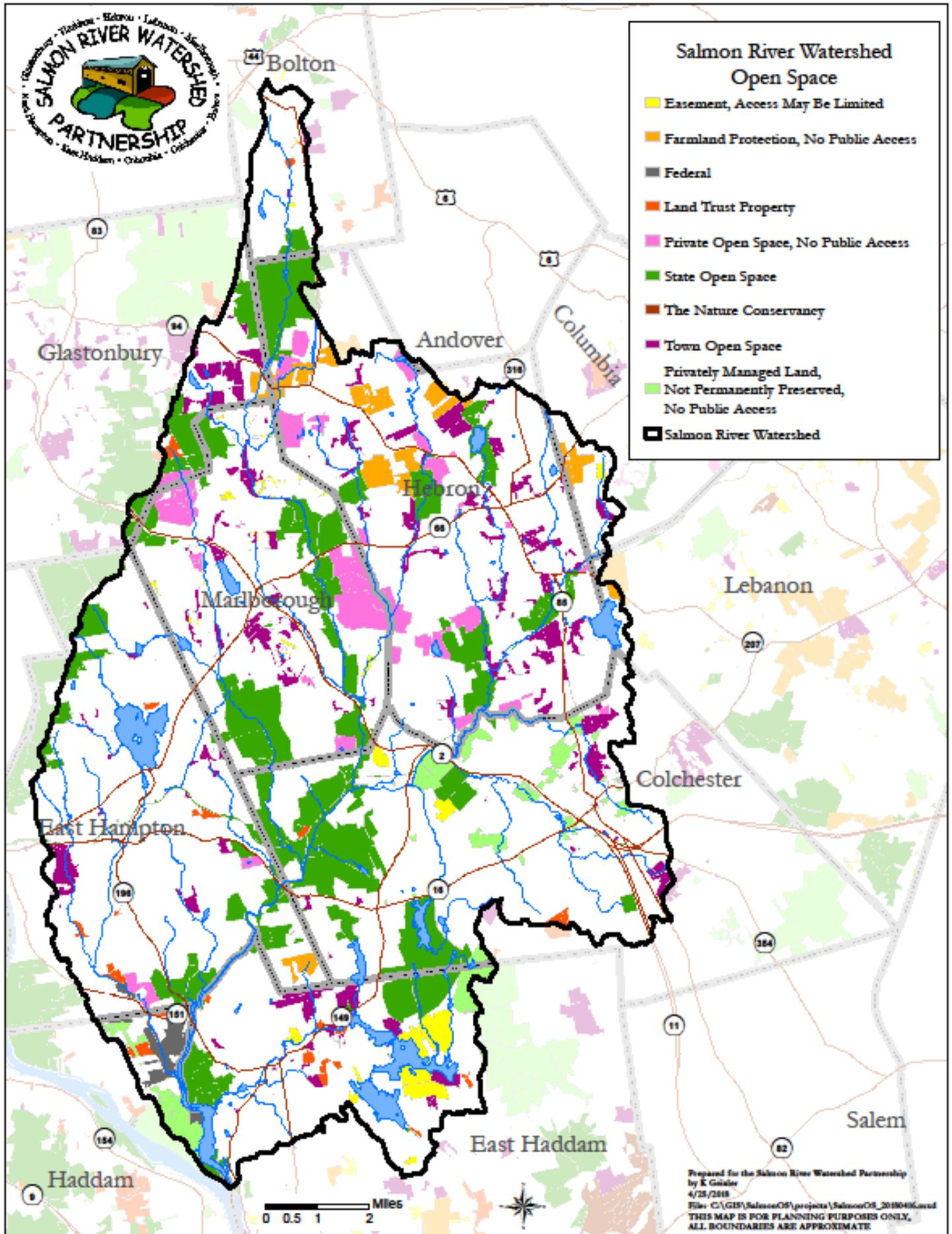


*By Frank Zitkus and Mike O'Leary*



### Salmon River Watershed Open Space

- Easement, Access May Be Limited
- Farmland Protection, No Public Access
- Federal
- Land Trust Property
- Private Open Space, No Public Access
- State Open Space
- The Nature Conservancy
- Town Open Space
- Privately Managed Land,  
Not Permanently Preserved,  
No Public Access
- Salmon River Watershed



Prepared for the Salmon River Watershed Partnership  
by E Guide  
4/25/2018  
File: C:\GIS\SalmonOS\projects\SalmonOS\_2018046.mxd  
THIS MAP IS FOR PLANNING PURPOSES ONLY.  
ALL BOUNDARIES ARE APPROXIMATE

# Cold-Cool-Warm Mapping Stream Temperatures

By Elizabeth Robinson and Patricia Young

Ask any fisherman, and he will tell you that there are cold streams and there are warm streams, and that tells you what kind of fish you can expect to find there. Brook trout can be found in our colder, usually headwater, streams, while warmer water supports species like smallmouth bass. However, relying on anecdotal “data” (aka fish stories) is not the best way to manage our local rivers and streams. Therefore we turn to a simple device, the HOBO® temperature logger, to record accurate and copious data for us to assign stream temperature ratings of “cold”, “cool” and “warm”. Building on previous CT Department of Energy and Environmental Protection data collection, SRWP has embarked on a multi-year project to categorize as many of the Salmon River Watershed’s perennial streams as possible.

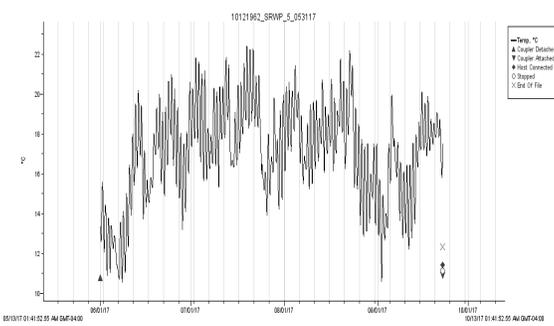
In May of 2017, with the help of our summer intern, Kate, H. The Nature Conservancy’s Liz R. and Hebron Conservation Commission Board member Chris F., we launched 10 HOBO® temperature loggers throughout the watershed. These loggers are set to record water temperature once every hour, and are then downloaded using a specialized HOBO® software. The software lets us graph the results and also export data to an excel format to select time periods for temperature averaging, allowing us to calculate and assign a “cold”, “cool” and “warm” category.

The logger set-up consists of a small waterproof thermometer unit, housed in a PVC pipe and attached to a metal base to keep the whole unit weighed down at the bottom of the stream. It is tied off to a nearby tree, further ensuring it does not get washed away. Throughout the summer, we checked each site to ensure that the loggers were still intact and covered with water. As stream levels dropped. Independent temperature readings were conducted as a field check.

Water temperature affects oxygen content. As water temperature increases, the oxygen content decreases. Temperature also affects the rate of photosynthesis of aquatic plants and the metabolic rate of aquatic organisms. It can also influence how sensitive organisms are impacted by environmental toxins, diseases and parasites.

Many factors can influence water temperature including; increasingly warmer air temperatures, ponds (both natural and manmade) which discharge warmed-up water during summer months, clearing along stream banks and developed areas that send stormwater to drainage systems that empty into nearby streams. Some of these factors can be corrected by measures such as disconnecting stormwater systems, replanting trees along river banks and removal of old dams.

Of the ten streams we sampled, 4 were categorized as cold, 6 as cool and 0 as warm, using DEEP Fisheries recommendations.



## Top to Bottom:

1. HOBO® waterproof temperature logger,
2. 2017 Summer Intern Kate H. filling out logger data sheet at Raymond Brook in Hebron,
3. Liz R. with The Nature Conservancy downloading and relaunching the logger in the field and
4. Graph of summer average temperature for Blackledge River in Marlborough is 17.42°C--cold river section!

## Preserving the Past in Moodus

The East Haddam Land Trust recently received a gift of about 20 acres, adding to 16 acres donated about twenty years ago. These 36 acres pro-



tecting about 1200 feet on both sides of the Moodus River were formerly the site of the Atlantic Duck Mill and the Falls Mill, major manufacturers of canvas, tent, and sailcloth. The mills were both destroyed by fire in the early part of the 20<sup>th</sup> century. The two properties were donated to the Land Trust by Attorney Myron Bernstein, a life-long resident of East Haddam. The site also includes the old Atlantic Mill Dam, as well as many stone and steel remnants of the old mills. This acquisition will someday be a significant component of a

continuous linear trail extending from the reservoir to the center of Moodus, protecting the Moodus River. The water quality of this tributary has a notable effect on the eastern portion of Salmon Cove.

*By Bernie Gillis*



## Protecting the Heart of a Forest & Wetland System

At a special town meeting last June, Columbia residents overwhelmingly supported the purchase of a 57 acre parcel referred to as the Oberlander property. Mint Brook flows through the parcel then through the north-west corner of Lebanon along the Airline Trail and then to Hebron where it joins Raymond Brook.

The Oberlander property is in the Wells Woods area of Columbia. The land in Wells Woods was originally sold as farmland in the 1800s by Mr. Wells of Boston. One by one the parcels were later abandoned because the land could not support a family. At one time there were 12 houses, a schoolhouse and several town roads connecting them. This property has many stonewalls outlining former farm fields, house and barn foundations and remnants of a saw mill on the brook.

Columbia has a detailed Open Space Plan with specified goals and criteria to protect valuable natural and cultural resources for future generations. The Wells Woods area is a focus area for preservation as it has over 1,275 acres of unfragmented forest lands, significant wetlands and wildlife habitats.

***“It’s a real gem with glacial till rock outcrops, wetlands, and untouched forest mat and canopy”. SRWP Board Member Bryan Tarbell***



*Note: Final preservation pending an anticipated June 2018 closing date*

## Steering Committee

### Watershed Towns

Bolton: Rod Parlee (temp)

Colchester: Jay Gigliotti,  
Randy Benson (alternate)

Columbia: Bryan Tarbell

East Haddam: Bernie Gillis,  
Jim Ventres (alternate)

East Hampton: Jason Josefiak,  
Josh Wilson (alternate)

Glastonbury: Tom Mocko,  
Dennis Mcinerney (alternate)

Haddam: Gail Reynolds,  
Jim McHutchison (alternate)

Hebron: Brian O’Connell,  
John Mullaney (alternate)

Marlborough: Peter Hughes

### Organizations

The Nature Conservancy:  
Shelley Green

Connecticut DEEP: Eric Thomas

### Land Trusts

Colchester Land Trust: Lisa Hageman  
Cathy Shea (alternate)

### Recreational Groups

Trout Unlimited: Duke Preston

### Member at Large

Silvio O. Conte Refuge-Haddam Neck:  
Jim McHutchison

Watershed Coordinator: Patricia  
Young

## Where are They Now? Meet Some of SRWP's Summer Interns



Meet Matt B., after volunteering with SRWP for a summer, he returned as SRWP's first summer intern, coordinating the volunteer monitoring program and assisting with other field work. The following summer he was awarded an internship with Mystic Aquarium working with their reptiles and amphibians and doing education programs. Matt is a

UCONN graduate and a former East Hampton resident. He is now the Terrestrial Ectotherms Keeper at the Fort Worth Zoo in Texas. Seen here with Speedy, a 115 year old, 370 pound Aldabra Tortoise.



Meet Jess L., a senior at URI and a Hebron resident. Jess volunteered with the SRWP in her junior and senior year at RHAM High School and then returned for two summers as a SRWP Intern, running the volunteer stream monitoring program and assisting with field work, including road culvert mapping and outreach programs. She then secured an impressive internship with URI's Coastal Fellows Program in her junior/senior

summer. In her final semester, along with classes, she is also a Teaching Assistant for Herpetology and Principles of Wildlife Ecology and Management.



Meet Fern M., a senior at UCONN with a double major in Environmental Engineering and Geography. Fern, a former Lebanon resident, worked with SRWP doing stream culvert assessments and helped with macroinvertebrate sampling for the

last three years. She was hired by CT DEEP Inland Fisheries, as a Culvert Mapping Lead Observer for a summer position, assessing road culvert for fish passage. And last summer and over winter break, worked as a Water Resource Environmental Engineering Intern with Milone and MacBroom Inc., a leader in the field of environmental engineering.

***The Salmon River Watershed Partnership strives to offer meaningful field learning opportunities and experiences for local students***

## 5 Easy Ways to YardScape & Protect Water

By Jane Brawerman

People, wildlife and our water resources...all the way downstream to Long Island Sound...can benefit from a healthy lawn and landscaping around your home. There are many elements to a well-planned landscape and well-maintained lawn, such as vegetated buffers to protect water resources; avoiding use of toxic lawn/landscape care products; sound fertilizing and lawn care practices; and a diverse mix of landscape plants. Benefits include reducing runoff, filtering pollutants, controlling soil erosion, enhancing habitat for wildlife and aquatic life, and reducing damage from flooding. Here are a few tips:

- If you live along a stream, pond or lake, plant a water-side buffer with a mix of tall grasses, shrubs and trees, or just keep these areas natural and let it grow.
- Direct gutter downspouts to rain barrels or areas where water can soak in like lawns or rain gardens.
- Test your soil before fertilizing your lawn, and use organic alternatives if fertilizer is needed. Also, sweep up fertilizer from sidewalks and driveways before it washes away in the next rain.
- Look for safe alternatives to toxic lawn care pesticides and herbicides, like those in "weed and feed" mixes, which are harmful to humans, pets, and the fish and other critters that live in streams and ponds.
- Diversify your landscape with a variety of CT native plants to provide food and cover for wildlife, and support pollinators!



For more information and ideas, check out *The Backyard Water Resources Guide: A Guide to the Stewardship and Protection of Backyard Wetlands, Ponds, Streams, Lakes, Rivers and Estuaries* published by the Connecticut River Coastal Conservation District. The guide is available on our website, [www.conservect.org/ctrivercoastal](http://www.conservect.org/ctrivercoastal), under "Resources" in the main menu.

WHEN YOU'RE FERTILIZING THE LAWN,  
REMEMBER YOU'RE NOT JUST  
FERTILIZING THE LAWN.



Top to Bottom; 1. recycled rain barrel, 2. native winterberry and 3. image Courtesy of Puget Sound Action Team, a cooperative venture between the Washington State Department of Ecology, King County and the cities of Bellevue, Seattle and Tacoma