

2017

Inland Fisheries Program Notes & Updates (Winter)



Connecticut Department of Energy &
Environmental Protection
Bureau of Natural Resources
Fisheries Division
79 Elm Street, Hartford, CT 06106

860-424-3474

www.ct.gov/deep/fishing

www.facebook.com/ctfishandwildlife

Inland Fish Management & Fish Culture

COLDWATER FISHERIES

2017 SPRING TROUT STOCKING. In December 2016 and January 2017, 250 broodstock Seeforellen strain Brown Trout were stocked into each of Highland (Winchester) and Crystal (Ellington) lakes; respectively. These fish had an average weight of 3.5 pounds each and were the last of the remaining large, broodstock size Seeforellens to be stocked into Connecticut waters. Due to cost-cutting measures, the decision was made in 2016 to discontinue production of this popular strain of brown trout from our Kensington Hatchery facility. The plan is to stock the remaining Seeforellen fry into rivers and streams for this spring, after which this strain will no longer be available in CT. The State of Maine has received fertilized eggs from the Seeforellen strain with the intention of starting a production program. Our hope is that, under a better fiscal environment in the future, the Fisheries Division might potentially be in a position to re-establish production of the Seeforellen strain, with eggs supplied back to us from the State of Maine.

The Fisheries Division is in its fourth year of implementing a statewide pre-season stocking schedule, as opposed to separate east and west scheduling. This new scheduling approach is aimed at giving the state hatcheries greater flexibility and efficiency in assigning hatchery staff and vehicular resources. This also allows the hatchery managers to have greater discretion in selecting which waterbodies to stock on any particular day, within temporal bounds set by Fish Management staff. The schedule is arranged into weekly and bi-weekly blocks that allows the hatcheries to select daily stocking locations, within that time block. This provides for greater efficiency in the hatcheries by affording hatchery managers operational flexibility to better determine which production ponds to utilize first and in balancing the staffing demands of on-going fish production duties and trout distribution.

Due to on-going drought-related water flow issues, fiscal and staffing constraints at hatcheries and the need to replace ageing and failing valves and other infrastructure at production ponds, adult-size trout numbers will be reduced by approximately 90,000 fish this spring. This reduction is being spread between the pre- (prior to Opening Day (OD)) and in-season (OD – mid-May) stocking schedules. Allotments in many areas have been modestly reduced and a number of other areas are being eliminated completely; a total of ~70 waterbodies (some stream sections were dropped, but not an entire stream in some instances) will not be stocked this spring. Therefore, not all areas typically stocked in the spring are scheduled to receive fish by Opening Day. The reason for eliminating previous stocking locations varies but in many instances is due to one of the following reasons; little to no documented usage by anglers, increased losses of public access or, in the case of many smaller streams, locations are currently stocked with brown trout fry or fingerlings or to eliminate stocking on top of wild trout populations (Brook and Brown). More detailed information concerning these planned reductions will be communicated to the public prior to Opening Day.

Cover: *The 21 newest volunteer CARE instructors. They were trained and certified at training held at DEEP's Marine District Headquarters (Old Lyme) in late February (see page 15 for more information).*

Approximately **532,700 catchable size trout** were produced and are available for pre-season and in-season stocking in 2017. In addition, 10,000 Brown Trout smolts have been produced for special programs such as sea-run trout fisheries. Also, 120,000 (“Seeforellen” and “Survivor”) Brown Trout fry and 145,000 Kokanee fry are currently in production for stocking into special designated waters. Approximately 310,000 trout are scheduled to be released prior to Opening Day (2nd Saturday in April, April 8 this year). The following have been produced for stocking this spring:

<i>Catchable size trout/salmon</i>	<i>Juvenile/yearling/fry trout & Kokanee</i>		
Rainbow Trout (10-12")	154,000		
Rainbow Trout (≥12")	35,000		
Brook Trout (10-12")	82,000		
Brown Trout (10-12")	220,000		
Brown Trout (≥12")	15,000	“Survivor” Brown Trout fry	20,000
Tiger Trout (10-12")	4,000	Atlantic Salmon fry	100,000
“Survivor” Brown Trout yearlings (7-9")	20,000	"Sea-run" Brown Trout smolts	10,000
“Survivor” Brown large adults (14-16")	1,500	“Seeforellen” Brown Trout fry	100,000
Surplus Broodstock (1-3 lb fish)	1,200	Kokanee fry	145,000
Totals	532,700		375,000

SURVIVOR BROWN TROUT. The hatchery staff continue to rear Survivor Brown Trout at Burlington State Fish Hatchery. Elastomer tagging material has been received and plans are being formulated for the marking of 5,000 Farmington River Survivor yearling Brown Trout this year. This task is manually intensive and often requires 10-12 staff-days to complete. For 2017, yearlings will be marked with a right orange tag. The larger Farmington Survivor Browns slated for stocking in spring of 2018, will be marked later this spring as time permits. The Age-2 Survivor Brown scheduled for stocking in mid-April 2017 were marked last spring with a Left Red tag.

RAINBOW SMELT. Beginning three years ago, preliminary work was initiated to explore the potential for restoring an historic smelt population into West Hill Pond (New Hartford-Barkhamsted). This once popular recreational fishery, and important forage base for trout, was lost due to unknown reasons some time back in the early 1990’s. In the next several weeks, spawning mats will again be placed into tributaries of an undisclosed private waterbody to collect fertilized Rainbow Smelt eggs during the spring spawn. Fertilized eggs will then be transferred to a tributary of West Hill Pond for maturing and hatching. If successful, prior stockings would have produced adult smelt that would now be reaching sexual maturity and should be displaying spawning activity. This tributary stream will be monitored during April 2017, prior to the movement of the spawning mats, to document if the previous egg introductions have been successful in producing smelt. This information will aid our evaluation of this program.

PUBLIC OUTREACH

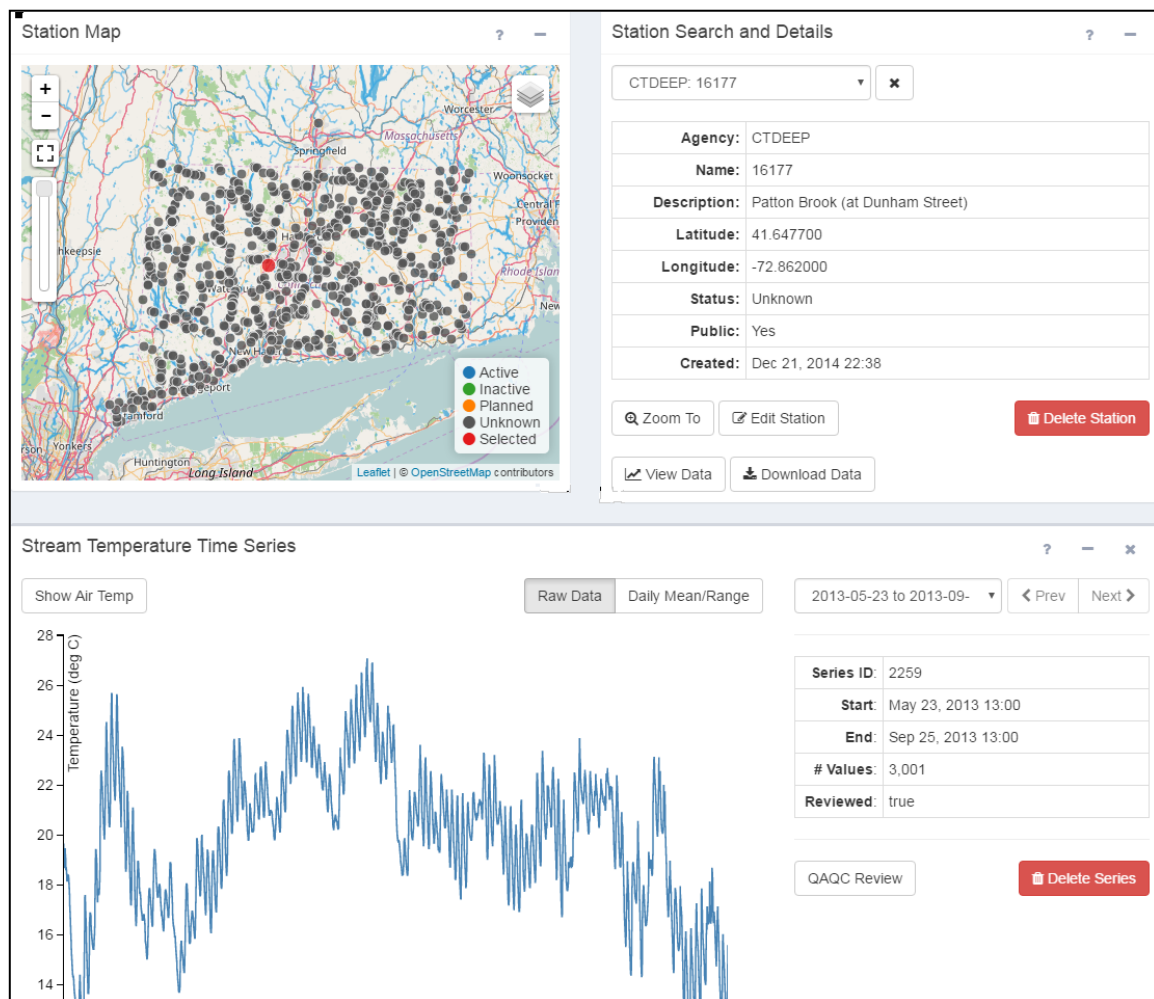
- Staff presented a “state-of-the-river” presentation to 65 members of the Farmington River Angler Association in January. This group of concerned anglers has been a strong advocate for the Farmington and had many questions about stocking, fish survival and the effects of the drought on the river.
- Staff attended the 2017 CFFA Fly Fishing Expo in February. This venue allows project staff to interact with over 350 avid anglers each year. Fisheries staff answered multiple inquiries regarding regulations, and new areas to fish. In addition, these formats provide an opportunity to receive feedback on site specific success. As an added bonus, anglers often provide us with new information on previously unknown wild trout populations in small streams. Information provided this year resulted in three new wild Brook Trout populations that were previously undocumented by IFD. If time permits, fish population sampling will be conducted this summer to collect information on these populations and formally document their occurrences.
- Staff also did a presentation to the Hartford Men’s Club covering *30 years of Adaptive Coldwater Fisheries Management in East Twin Lake* and the demographics of fishing license sales and BNR/Fisheries Division funding sources.

STREAM ANGLER SURVEYS. Plans are in place to determine a set number of waterbodies to survey this spring from Opening Day (OD) through May 15th. Efforts will focus on evaluating current trout stocking strategies and their effectiveness in providing the best possible fishing opportunities and utilization of stocked trout on OD and throughout the early spring season.

STREAM SAMPLING and MONITORING

- **Statewide stream sampling. Winter activities** centered on data proofing, database updating and preparing materials for annual progress reports. Sampling crews in the summer of 2016 encountered numerous dry streams due to the severe, statewide drought conditions. The effects of the severe drought on the State’s stream fish populations is currently unknown, but sampling specific sites (e.g., long-term reference streams and other streams with long standing annual data sets) in 2017 may help shed some light on the overall impacts.
- **Stream Crossing Assessments.** Nearly 100 stream crossings were evaluated during 2016 using the NAACC (North Atlantic Aquatic Connectivity Collaborative) protocols and the data was entered into the regional NAACC database.
- **Regional Water Temperature “Tools”.** Project staff attended a two day water temperature workshop sponsored by the USGS/Northeast Climate Science Center. The meeting was attended by representatives from all the New England states, most federal agencies and a cross section of collaborating NGOs and academic institutions. Staff from the USF&WS Conte Fish Lab demonstrated the **ECOSHEDS** website. Discussion ensued regarding the ability of this electronic storage portal to house, transfer and synthesize regional water temperature data. There were lengthy discussions about possible improvements and what cooperators saw as important tools and interfaces that could be added to the system.

As a tool this website holds great promise for improving our understanding of stream temperature dynamics and their effects on fish communities. The **ECOSHEDS** site is open to the public and all Connecticut DEEP water temperature data will be housed at the site for easy public access by towns, consultants and private individuals. Currently accessible through the website are water temperature data from over 890 Connecticut streams. A simple shopping cart system, similar to what is found at many online stores, is used to download data (and it is free!).



Screen shot of the web interface at ECOSHEDS showing the map, description and temperature data.

WARMWATER FISHERIES

ICE ANGLER SURVEYS. Ice-fishing angler surveys were conducted at three lakes: Mansfield Hollow Reservoir (Mansfield), Coventry Lake (Coventry) and Moodus Reservoir (East Haddam). Even though this winter has been relatively mild the ice-fishing season at Mansfield Hollow Reservoir was average with 59 days of safe ice. Coventry Lake, however, had safe ice for only three weeks in February. Moodus Reservoir never froze sufficiently to support ice fishing.



Lewis Stein with an 18-inch Walleye caught at Coventry Lake during the winter of 2017



32-inch Northern Pike caught by Mike Kelley while ice fishing at Mansfield Hollow Reservoir 2017

NORTHERN PIKE. Four pike spawning marshes have been prepped for the 2017 Northern Pike propagation season. Broodstock collection began earlier than normal this year with the first adult pike arriving at the Haddam Meadows weir trap on February 28th.

Two Northern Pike stocking/rearing experiments that began in 2013 have been concluded with mixed results. To review, in 2013 and 2014 yearling Northern Pike (10-16 inches) from Zetts Fish Farm were stocked into Mansfield Hollow Reservoir to assess their contribution to the adult population vs. the four-inch fingerlings produced in the Mansfield marsh. Although the total number of adult pike caught in the trap nets during the springs of 2014-16 was low, Zetts pike were sampled each year. Further analysis of pike ages caught in the trap nets will determine the relative contribution of the Zetts yearlings verses the marsh fingerlings in the adult population.

The second study compared total production of pike fingerlings from stocking pike fry (donated by the State of New Jersey) verses our traditional method of stocking broodstock pike that spawn in the marshes. Two Wyantenock Marshes were selected for this experiment and treatments were alternated between the marshes each year for four years. Results indicated that there was no significant differences in the production of pike fingerlings between these two treatments; however, production from each marsh was significantly different.

In 2016, Fish Management staff in cooperation with Burlington State Fish Hatchery staff raised Northern Pike fry to fingerling and yearling sizes in a rearing pond on the Punch Brook property. Punch Brook Pond #6 was stocked with 21,000 fry from New Jersey on March 30th. Nine percent of these fish survived to May 20th (small fingerling averaging 2.8 inches) at an estimated cost of \$2.68 per fingerling. This cost is less than the estimated cost of raising fingerlings by our traditional method of stocking broodstock (\$4.60 per fingerling). For unclear reasons, survival to yearling size (average length of 10 inches) was less than expected (6%). In 2017, we will repeat this experiment to identify if this is a viable alternative to our traditional production methods.



Punch Brook Northern Pike fingerlings. Left are the small May fingerlings and on the right, a large advanced September fingerling.

CATFISH. Preparations for ordering Channel Catfish to be stocked in May 2017 have been made. This includes a review of past stocking densities and incorporating any changes that may be needed in the coming year.

Habitat Conservation and Enhancement

CTDOT CULVERT PROJECTS, FISH PASSAGE AND INSTREAM HABITAT ENHANCEMENTS

HCE staff review all Connecticut Department of Transportation (DOT) bridge and culvert replacement projects as well as many locally regulated projects. Staff ensure that such projects are designed to allow the unrestricted movement of fish upstream and downstream and do not degrade aquatic and riparian habitats. In addition, instream habitat structures are often recommended to restore/enhance instream habitat features or to mitigate unavoidable habitat losses. Permit conditions require HCE staff to assist project contractors during construction to ensure the proper installation of fish passage and habitat structures. Onsite construction management services were provided for the following projects:

- **Hockanum River, Manchester**

Onsite construction management services were provided for work associated with an off-ramp widening project at Route 84/83 in Manchester. A rootwad/boulder complex was installed to provide overhead cover, velocity refugia and increase the overall diversity of instream habitats.

View of rootwad and boulder complex installed in the Hockanum River.



- **Haddam Meadows Marsh System Restoration /Pole Bridge Brook Mitigation Project**

The HCE Program has received regulatory approval to utilize the Haddam Meadows Northern Pike Marsh dredging project as mitigation for the inability of the CTDOT to provide suitable fish passage at its Route 9 Pole Bridge Brook (Haddam) culvert sliplining project. CTDOT will providing funding to the Wildlife Division's Wetlands Habitat and Mosquito Management (WHAMM) Unit to restore the marsh. The Haddam Meadows Marsh system has been actively managed by the Fisheries Division for Northern Pike production since 1975. Channels need to be clear of vegetation and of sufficient depth in order to provide adult Northern Pike access to spawning habitats. In addition, adults and juveniles require unrestricted, free access through the channels to emigrate out of the marsh when water levels are lowered. DEEP and the DOT worked cooperatively to find a project that would serve as appropriate mitigation for the Pole Bridge Brook project. The Division seeks to mitigate projects that have unavoidable negative impacts to fish habitat with projects that will have positive impacts to fish habitat.

Staff prepared and submitted for approval, an application form and associated materials for a Connecticut Addendum Army Corps of Engineers (ACOE) General Permit State of Connecticut (CT GP). The submission seeks a permit that will be required for the Haddam Meadows Marsh Restoration Project, described above. A request for a Natural Diversity Database review was submitted to obtain guidance with regard to any State-Listed or Endangered Species within the

project area. The Division has recently been notified that the permits have been issued and this work may proceed. Completion is anticipated in the fall of 2017.

View of the upper Haddam Meadows Northern Pike Spawning marsh.



▪ **Fish Passage Monitoring, Tributary to Lyman Brook, Marlborough (Route 2)**

This project is part of a three-year study to be conducted by HCE staff to evaluate native Brook Trout passage performance at a culvert slipline project that was retrofitted with an outlet fishway and culvert baffles. Passage is being assessed with the use of a passive integrated transponder (PIT) tag monitoring system. The PIT tag monitoring system was installed last fall and Brook Trout movements were monitored before, during and after the October 2016 spawning season.

Preliminary review of 2016 data indicates that several trout tagged below the fishway/culvert have successfully passed upstream and that the culvert is no longer a migratory barrier. Preliminary data and results were discussed in a presentation provided at the 50th annual meeting of the Southern New England Chapter, American Fisheries Society.

View of pool/weir fishway constructed at the tributary to Lyman Brook outlet.



COOPERATION AND OUTREACH

- Staff attended the 18th Annual Northeast Aquatic Plant Management Society (NEAPMS) Meeting in Portsmouth, NH. The NEAPMS is a diverse group of professionals representing private industry, state and federal agencies, and academia dedicated to understanding the unique needs of aquatic plant management in the Northeast and communicating that knowledge to both the public and private sectors. Each year the NEAPMS meets to further the understanding of aquatic plant management, share research and plan management needs for the coming year.
- Staff assisted the State Fish Pathologist with fish health screenings at the Quinebaug Valley State Hatchery. This included taking samples from all strains of trout at several different size classes. This

testing is required to ensure healthy populations of trout raised in the Division's hatcheries. The trout will be stocked in streams, rivers, and lakes throughout the state.

- Staff participated in transition meetings with DEEP's Diadromous Fish Program to plan the re-distribution of duties following the retirement of two key HCE staff. One staff retired this month (see below) and another will retire next month. Due to the current hiring freeze, neither will be replaced in the near future and critical duties will be assumed by other HCE and Diadromous Fish Program staff. Planning and coordination for this transition continues.

Special note!

MARK JOHNSON RETIRES

Mark Johnson has been a fisheries biologist with DEEP for 33 years and retired as of February 28. Mark began his career as a seasonal worker (1983) in the Western District and took a full-time position with the Trawl Survey in the Marine Program in 1986. In 2000, he transferred to a position with the Habitat Conservation and Enhancement project within the Inland Fisheries Division. Mark was the point person for protecting tidal fish habitat statewide—Long Island Sound and up the major tidal rivers of the state. Many different kinds of activities within that area impact fish habitat and need permits from the DEEP and the U.S. Army Corps of Engineers and permit analysts looked to Mark to provide guidance and recommendations. Mark reviewed all kinds of projects—bridge crossings, power plant intakes, marina dredgings, proposed docks, beach re-nourishment projects. He also took on many special projects, including writing the annual progress report to the U.S. Fish & Wildlife Service.

Mark was highly regarded by his colleagues and he will be missed, but we wish him well in retirement.



Mark Johnson sorting lobsters on the deck of the R/V John Dempsey.

Diadromous Fisheries Restoration

SEA-RUN ATLANTIC SALMON

- Staff transferred 98,500 ‘eyed’ Atlantic salmon eggs from the Kensington State Fish Hatchery to streamside incubators operated by the Tributary Mill Conservancy in Old Lyme. This is a privately-run volunteer hatchery at an old mill that uses brook water to incubate salmon eggs. When these eggs hatch, the fry will be stocked into the Salmon River watershed.
- **Salmon-in-Schools** – In January, staff at the Kensington State Fish Hatchery helped with the distribution of approximately 16,000 Atlantic salmon eggs to 80 incubators in 58 schools. Diadromous program staff also delivered eggs to Chester Elementary, Essex Elementary, Great Neck Elementary, Waterford High School, and Ella Grasso Technical High School.

Students from the Academy of Aerospace and Engineering Elementary School in Hartford inspect recently arrived salmon eggs (photo by Elizabeth Kendall).



SEA-RUN TROUT

- The fourth year of sea-run brown trout (Iijoki strain) eyed egg importation occurred in January, 2017. The flights from Oulu, Finland through Munich Germany and then to Boston’s Logan Airport were on-schedule and the 37,000 eggs were in incubation trays at the Burlington State Fish Hatchery (BSFH) after 83.5 hours in transit. Since that time, the eggs have hatched and the sac fry have been transferred into small aluminum troughs inside the hatch house for feeding. To date, mortality has been negligible.

Left- The 2017 shipment of sea-run Brown Trout eggs during routine disinfection at the Burlington state fish Hatchery.

Right- The flight path from Munich to Boston.



- In February, Diadromous staff evaluated fin condition for 300 of the approximately 10,000 sea-run trout pre-smolts being reared at BSFH. As was the case last year, results from this 'quality control' check reveal that very few individual fish have fin condition that would hinder survival in saltwater. While fish were not individually evaluated on coloration, when compared to last year, it appeared that a lower percentage of the fish sampled exhibited bright silver coloration characteristic of smolts (see photo below). It is unknown if this indicates that fewer of these smolts will go to sea and ultimately return as adults. All of these smolts will be stocked in mid-March, 2017 and there is still time for the fish to turn silvery.

By February, a lower percentage of this year's smolts had developed bright silver coloration typical of a salmonid that is preparing to head for saltwater.



- Provided technical guidance to New England Hydropower on the location and design of the upstream eel pass below the newly constructed (and soon to be operating) Hanover Pond Archimedes Screw Generator (ASG) at the Hanover Dam (Quinnipiac River, Meriden). The ASG generates electricity by spinning a shaft that is turned by water descending down a large screw (as seen below in the right photo).



Left: The Archimedes Screw is visible on the left of the photograph. The white pipe seen rising above the water surface along the far wall is the top of the eel pass, which is angled to allow eels an easier ascent. Water will be added to the end of the eel pass (above water) and all the eels that climb the eel pass will fall into a trap (to be installed later) so that they may be counted and released upstream of the dam. The Hanover Pond Fishway, which was built many years ago, is seen to the right, inside the black fence. **Right:** The entrance to the Hanover Pond Eel Pass. This eel pass, constructed of 6" PVC pipe is filled with "Bio Barrels" to provide the textured substrate needed by eels to ascend the pass. Bio Barrels are more typically used to de-gas ground water in trout hatcheries. (See also the section on "Fish Passage").

RIVER HERRING

- Participated in an Atlantic States Marine Fisheries Commission (ASMFC) Technical Committee conference call to discuss State Fisheries Management Plans for American Shad and river herring. Following this call, the ASMFC Management Board approved individual state management plans based upon the Technical Committee's recommendations. This call reviewed the plans for about a third of the states. Connecticut's American Shad Plan will be reviewed during a future call. A state

must have an approved management plan in order to allow a fishery. Connecticut has fisheries for American Shad but not river herring.

- Planned for translocation of shad and river herring this coming spring. The program moves Alewives from Bride Lake and Blueback Herring from Wethersfield Cove to other river systems to support run restoration. Alewives are also given to the states of Rhode Island and New York to promote restoration in those areas. In addition, fish are transferred to research labs and above hydroelectric facilities to support research and evaluation studies. A great deal of planning and coordination is required to allow these activities to proceed smoothly during the busy spring season.

FISH PASSAGE

- Construction of the Chapmans Pond Fishway (Menunketesuck River, Clinton) was completed in December and staff reviewed and approved the final project with the contractor, engineer, and the project sponsor Connecticut River Coastal Conservation District (CRCCD) in anticipation of the CRCCD turning the fishway over to the DEEP. The fishway will be operational for the spring fish runs but there are a few more tasks to be completed, such as site signage, electrical line, and a new gate.

A foreman from Schumack Engineered Construction stands on the entrance of the Chapmans Pond Fishway during a high tide and Dave Ellis from the Fisheries Division stands on an intermediate resting pool. The fishway exit and trap are off the photo to the right. The tall concrete structure between the two men will house the trap for an eel ramp and holding tank.



- The State Bond Commission approved funding for the removal of the Springborn Dam (Scantic River, Enfield). The removal of this state-owned dam has been in the planning stages for many years and has received crucial federal funding from “Hurricane Sandy Resiliency grant” but after the engineering was completed, it was realized that the Department did not have sufficient funds. With the action by the Bond Commission, sufficient funds are now secured, all permits are in place, and a contractor has been selected. The project is expected to start in July and be completed before the end of the year.
- New England Hydro Company (NEHC) has been constructing the first Archimedes Screw Generator (ASG) in North America throughout the fall and winter on the Quinnipiac River in Hanover Pond, Meriden. For a photo of the project, see the section above on American Eel. The project’s federal license included the provision of an eel pass (see above) and also several evaluation studies. There

has been a Denil fishway at the dam prior to the development of the hydro project and the Division and the U.S. Fish & Wildlife Service are requiring studies to show that the operation of the ASG does not diminish the effectiveness of the fishway. Furthermore, the main path of downstream migrating fish will be via the Screw (which is opposite from traditional hydro projects that seek to have fish avoid turbines). This has been tested in Europe to show that the passage does not injure downrunning fish but not with North American fish, like American Shad. Staff have worked with NEHC staff to design and plan these tests, which will be conducted this spring.

- The Flock Process Dam Removal Project (Norwalk River, Norwalk) hit a snag when the City failed to reach an access agreement with an abutting landowner. Department staff intervened and the final result is an agreement by all parties to go ahead with a revised plan that does not require such access. The project is expected to start this summer and be completed before the end of the year.

The Flock Process Dam is the first dam on the Norwalk River. Its removal will open many miles to migratory fish, which will then be able to reach the Merwin Meadows (aka Dana) Dam in Weston.



- Staff continued to work with engineers and other parties to plan future fish passage facilities including large fish lifts at the Scotland (Shetucket River, Windham), Rainbow (Farmington River, Windsor) and Derby (Housatonic River, Derby) dams, small fishways on dams on the Falls River in Essex, and dam removals in New Milford, Glastonbury, and Avon.

OUTREACH & COLLABORATION

- Staff attended the February DOT/DEEP/ACOE/EPA Interagency Coordination Meeting.
- Staff participated in transition meetings with DEEP's Habitat Conservation and Enhancement Program to plan the re-distribution of duties following the retirement of two key HCE staff (see HCE report). One staff retired this month and another will retire next month. Due to the current hiring freeze, neither will be replaced in the near future and critical duties will be assumed by Diadromous Fish Program staff. Planning and coordination for this transition continues.

CARE & Constituent Services

WINTER FESTIVAL. The 11th annual *No Child Left Inside*[®] **Winter Festival**, a partnership with DEEP's State Parks Division, was held at Burr Pond State Park this past February and attracted over 600 participants. Although it was a warm winter, ice thickness was sufficient to allow for supervised ice fishing with family groups being escorted onto the ice by Certified CARE Instructors throughout the day. Families were shown how to setup a tip-up, use a jigging rod, and drill a hole in the ice. Although the fishing was slow this year, some lucky anglers were rewarded with catches of chain pickerel, perch, and sunfish. The new Fisheries Outreach and Education trailer was on display, and families took advantage to learn about Connecticut's freshwater fish and fishing opportunities. Our Northwest CARE Instructor team setup the fish fillet and cooking station. Instructors demonstrated proper filleting techniques and then fried fish for festival participants to sample.

Chief CARE Instructor Dave Connelly teaches students how to setup a tip-up at the No Child Left Inside[®] Winter Festival at Burr Pond State Park.



ICE FISHING CLASSES. Hosted nine Family Ice Fishing classes for 154 students in the towns of Ansonia, Farmington, Glastonbury, Killingworth, Litchfield, New Haven (2), Oxford, and Ridgefield. Certified CARE Instructors taught students about winter pond ecology, safety on the ice, ice fishing equipment, proper bait and how to rig it, and fish identification and ecology.

SPRING CLASSES Scheduled 19 Family Fishing Courses for spring 2017 in Avon, Beacon Falls, Berlin, Colchester, Derby, Farmington (3), Glastonbury, Griswold, Hampton, Hartford (2), Killingworth (2), Litchfield, Newington, Stamford, and Wallingford, Again this spring, the CARE program will be offering a special "Mom and Me" and a "Women Only!" fishing course.

CARE CENTER PROGRAMS Staff has coordinated and scheduled 20 field trips for Hamden Public School 6th grade students and East Lyme middle school students to the CARE Center on Forster Pond for this spring. Teachers will incorporate modules from the CARE curriculum into science lessons prior to the class field trip to the CARE Center on Forster Pond. Every student will then visit the CARE Center for a day of aquatic education and angling.

INSTRUCTOR TRAINING Recruited, trained, and certified 21 new Instructors at DEEP Marine District Headquarters this past February 25th. This group of newly certified CARE Instructors was a passionate group of anglers that expressed their commitment to educating the next generation of anglers. The next opportunity for CARE certification training will be June 24th, 2017. Instructor volunteer hours are

documented and used as State match for federal funding, which allows CARE to function with little to no State funding. Knowledgeable and passionate candidates interested in joining the program should have them contact Tom Bourret or Justin Wiggins at 860-663-1656 or thomas.bourret@ct.gov.

ANGLER'S GUIDE PHOTO CONTEST. The winner of the 2017 Angler's Guide contest was unveiled at the Winter Festival. The winner, Derek Angel of Avon, was selected from over 250 submissions. This photo was taken by his friend Nick Walsh using a Samsung SmartPhone. Congratulations to Derek and the five honorable mentions.

Derek Angel, winner of the 2017 Angler's Guide contest with DEEP Deputy Commissioner Susan Whalen at the unveiling of the cover of the 2017 Angler's guide.



REPORTS AND OUTREACH.

- **A summary report, *Increasing Angler Participation***, has been finalized. The Fisheries Division has been working to increase participation in angling by 30% since detailed in the BNR strategic plan. The increase was 8.7% equating just over 15,000 more participants over the five year period. The report presents various statistics about fishing license sales and a brief synopsis of various initiatives to recruit, retain, and recapture anglers from 2011-2016.
- **The Annual Fish Stocking Report**, which details the number and type of fish stocked by the Fisheries Division has been finalized and is available on the Fisheries web page (www.ct.gov/deep/fishing and then click on the "[Annual Fish Stocking Report](#)" link under "featured Links").
- **Interactive fish and macroinvertebrate map:** In a collaborative effort with UConn Center for Landuse Education and Research (CLEAR), an interactive map that displays fish and macroinvertebrate community data is now available through the CT Eco web page. The purpose of this map is to display the tremendous amount of fish and macroinvertebrate community data that has been collected by Fisheries and the Bureau of Water Protection and Land Reuse (WPLR) over the years and is intended for use by the public, land use commissions, consultants, academia, and DEEP staff.

Currently the data available in the map includes a large portion of our "*All Species*" data for lakes/ponds and rivers/streams, Data for gamefish only sample events (Trout, Wild Trout, Bass, Walleye, Pike), Atlantic salmon monitoring, and Sea-run trout monitoring may be added at some time in the future.

This interactive map is found at: <http://cteco-web1.grove.ad.uconn.edu/projects/fish/index.htm> (tool performance is optimized by using google Chrome) and map features currently include: search by waterbody, town, or fish species capabilities, accordion tabs on right-hand menu to reduce clutter, green "Check" or red "X" displayed to show if data does or does not exist, "tabs" for each year sampling data is available, exportable data, and "Zoom To" capabilities.

- **Going Live Stream:** One of the hottest trends for social media is streaming content “Live”. We have begun to use this feature within our Facebook page. Streaming live video is attractive to social media watchers due to the unpredictable nature of “live” video and the spontaneity of images and conversation. The audience can submit comments to the live feed and by answering these questions or comments, audience members feel like they are a part of the conversation.

The most recent “live” feed occurred on March 6, 2017 on the banks of our lower Northern Pike spawning marsh. Biologist Chris McDowell was interviewed by Mike Beauchene as he measured and released about 6 pike from the trap into the lower marsh. At one point over 120 people were watching live. Once the live feed is over the video segment remains on the Facebook page. Within two days over 5,500 people had viewed the 20 minute segment.

A SAD NOTE, REPORTING THE LOSS OF A CHERISHED CARE INSTRUCTOR

Master Instructor **Richard Emmons** passed after 14 years of altruistic volunteer time with the CARE program. Recipient of prestigious awards such as Field & Stream magazine “Hero of Conservation” and “Aquarion Environmental Champion”, Dick was a man who dedicated his post-retirement life to teaching families about water, fish, and fishing. Dick established himself as the guy who brought fishing education to lower Fairfield County. He was an energetic casting Instructor for CT Special Olympics, and constant volunteer for “Take a Vet Fishing”. Dick Emmons is only the second Instructor in CARE history to gain the title of “Master Instructor”, joining the ranks of William “Doc” Skerlick.

Dick donated over 2000 hours to the program, established and conducted 113 classes and events and taught 8,200 students. Dick was loved and admired by all whose lives he touched with his ever-positive attitude, willingness to take on challenges, and remarkable personal charm. Our CARE family will truly miss our Uncle Dick.

Richard “Dick” Emmons delivering a lesson of fish identification and ecology at a Stamford Family Fishing Course.



The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.