Federal Aid in Sport Fish Restoration F-64-E-28 Annual Performance Report – F16AF00159

2016

Connecticut Fisheries

Aquatic Resources Education





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State of Connecticut Department of Energy and Environmental Protection Bureau of Natural Resources Fisheries Division



Project Title: Connecticut Aquatic Resources Education (CARE)

Period Covered: January 1, 2016 to December 31, 2016

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Date Submitted: March 24, 2017

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www.fishbrain.com

Cover photo: Students who visit the CARE Center on Forster Pond are often rewarded with excellent catches!

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Summary

During 2016, the Connecticut Aquatic Resources Education (CARE) program completed its 30th year of introducing new anglers to the lifetime sport of fishing! A total of 7,670 participants were educated through CARE student activities. Staff focused efforts and successfully increased the use of the CARE education center on Forster Pond, hosting 19 field trips for 533 sixth grade students in May and June. Two new Family Fishing Courses were offered in 2016 aimed at attracting women to fishing - a "Women Only!" course at the CARE education center and a "Mom and Me" course in Farmington.

CARE staff collaborated with 174 volunteer instructors and also recruited, trained and certified six (6) new instructors in 2016. Efforts on recruiting and certifying additional volunteer



instructors will remain a top priority for 2017, as the success of the CARE program is largely dependent upon these volunteers. Keeping instructors motivated, supported, and engaged is challenging as we attempt to expand student opportunities. An in-service training for Instructors focused on one of Connecticut's most sought after gamefish, trout, attracted 32 Instructors. This topic allowed staff to increase instructor knowledge on a variety of drought/trout related issues including hatchery production, effects of drought on trout populations, invasive species that are threating trout habitats, wild trout habitat requirements, and the differences between wild trout, native trout, and stocked trout.

CARE staff proudly introduced our new educational materials to students in Family Fishing Courses - the Connecticut specific "LET'S GO FISHING!" student workbook and a formal Family Fishing Course PowerPoint presentation. These materials received great reviews by students and Instructors.

It is with great sadness that we note the passing of Richard Emmons. Dick donated over 2,000 hours to the CARE program and conducted 113 classes with a total of 8,200 students. Dick was the recipient of the Field and Stream magazine "Hero of Conservation" award and an "Aquarion Environmental Champion". This 2016 summary report is dedicated in his honor. Thank you Dick, for all that you were able to do for the youth of Connecticut.

Background

For many years, this project has been conducted by the DEEP's Inland Fisheries Division. At the end of 2016, the Inland Fisheries Division and the Marine Fisheries Division were merged into one division- the Fisheries Division (FD). Despite the fact that much of the work reported herein was accomplished when the Inland Fisheries Division still existed, in this report and going forward the text refers to the Fisheries Division (FD).

Beginning with the passage of Section 26-31a of the Connecticut General Statues in 1986, the Connecticut Aquatic Resources Education (CARE) program has been contributing directly to the mission of the Connecticut Department of Energy and Environmental Protection's (DEEP) Fisheries Division (Fisheries); *To Advance the Conservation, Enhancement, Restoration, Use, and Appreciation of Connecticut's Inland and Diadromous Fisheries and Fish Habitats*.

Specifically the CARE program strives to:

- increase public awareness of aquatic resources
- help introduce students to fishing
- promote environmental stewardship
- encourage responsible behavior among citizens by fostering a respect and knowledge of our State's natural resources
- continually adapt our message to meet changing family and societal needs.

Since 1986 the program has compiled the following statistics:

- CARE volunteers have donated the equivalent of \$4.35 million in volunteer services to the DEEP
- Instructors have taught 197,000 students
- Over 2,000 volunteers have contributed their knowledge and time taught at CARE events.

Implementing CARE

The CARE program has three jobs: Job1- Student Activities, Job 2- Program Administration, and Job 3- Facilitation of Fisheries of Outreach and Communications.

JOB 1 – Student Activities

Job 1- Student activities remain the top CARE priority as we continue the program's history of developing an interested, knowledgeable, and skilled fishing constituency. Student activities are the primary function of the CARE program as they have the greatest ability to create

- 1) Basic fishing *participants*;
- 2) More knowledgeable anglers,
- 3) Active *stewards* of aquatic resources.

Essential to success of Job 1-Student Activities is the continual recruitment of new and training of existing volunteer instructors, so that they develop and retain the skills and confidence to conduct or assist in facilitating a Family Fishing Course. CARE instructor volunteer time is documented and used as state in-kind match for federal funding, which allows CARE to function with little to no State funding.

The five CARE student activities are; Family Fishing Courses, Forster Pond Courses, Family Ice Fishing Classes, Summer Fishing Classes, and Special Fishing Events (Table 1). The goal of each

type of student activity is to provide a broad complement of fishing related content, to have as many students as possible participate in a fishing trip, and develop a support network by involving family members. Student activities vary with content, interaction time (IT), and instruction location. This variability enables CARE to customize instruction based on the participants and creates a hierarchy of instructional outcomes, including; participant - students who are competent with basic fishing skills and awareness, angler- students who continue to fish on their own, and **steward** - students who engage in activities that support our aquatic resources.



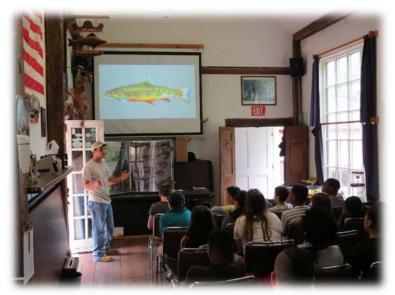
Fishing trips, while critical to creating long-term fishing participants, can be labor intensive, ensuring each participant has a functional rod and reel, terminal tackle, and hopefully, biting fish. Photo by Mike Beauchene

From 1986-2008, CARE reported student education by estimating the amount of instructor contact. For example, the contact for a student spending 6-10 hours in a Family Fishing Course was considered equivalent to a student spending 30 minutes in a special fishing event. Although easy to report, this did not represent actual instructor to student interaction. It also made meaningful comparisons among class types nearly impossible.

Beginning in 2009, CARE implemented *IT* as a method to standardize quantification of learning and contact. *IT* is calculated as the actual hours instructors spent teaching multiplied by the number of students participating in the event. *IT* has provided a:

- More insightful measure of educational activities;
- Common denominator for comparison among class types;
- Accurate measure of the relative contribution of class types to annual results;
- Data source from which we can better allocate effort to improve effectiveness;
- Consistent measure of educational results between years.





Forster Pond at the CARE center offers high catch rates for bass and sunfish. Students spend the morning in the CARE Center learning about tackle, baits, how to cast, how to tie a strong knot, and fish identification and ecology (right). Almost every student has success as evidenced by the big smiles (left). Photos by Justin Wiggins

Table 1. Topics, Interaction Time (*IT*), and expected outcome for each of the five CARE student activities. The shaded portion of the circle represents the relative quantity of that topic covered for the respective student activity. For example, all family fishing courses cover "Fishing Tackle" in detail while only a small proportion of special fishing events cover that topic.

		Stu	udent Activity		
	Family	Ice	Forster Pond	Summer	Special
Topic	Fishing	Fishing Classes	Courses	Fishing	Fishing Event
Fishing Tackle	Courses			Classes	\bigcirc
Tioning roome					
Casting Practice		O			O
Knot Tying		0		0	0000
Natural Baits				•	0
Regulations & Safety					0
Fish Identification					•
Care of Catch-Fish Harvest,		\circ		\bigcirc	
Consumption, Catch & Release					
Fish Biology & Management		igoplus		O	0
Habitat & Water Quality	0	0		Θ	0
Fishing Trip					
Family Involvement			0	loop	0
Interaction Time	6	3.5	12	2.5	1
(hours/student)					
Staff Time		O	O	O	O
Expected Outcome	Angler/Steward	Angler/Steward	Angler/Steward	Participant & Environmental Knowledge	Participant & Environmental Knowledge

Family Fishing Courses comprise a single classroom meeting for two hours followed by an angling experience to a local waterbody. Family Fishing Courses are taught by certified volunteer instructors and attended by CARE staff for evaluation and quality control. The classroom instruction follows our Connecticut specific "LET'S GO FISHING!" student workbook and is augmented by a matching PowerPoint presentation.

These courses require partnerships with municipal park and recreation programs or other youth/family organizations. In comparison to our four different student activities, the Family Fishing Course is number one in creating future anglers and environmental stewards as it covers a

variety of fishing topics while in a structured classroom setting (Table 1).

Ice Fishing Classes are a single meeting two-hour class taught by volunteers and attended by CARE staff during the months of January and February. The classroom instruction follows our Connecticut specific "LET'S GO FISHING!" student workbook, which is augmented by a matching PowerPoint presentation. Families that attend these classes are invited to participate in Family Ice Fishing field trips lead by CARE instructors. Additionally, where on-site waterbodies are available, an on-ice experience is offered immediately following the classroom lesson.



A happy young angler shows off his catch at a "Mom and Me" Family Fishing Course in Farmington.



All Ice Fishing class students are invited to several on-ice instructional events lead by Certified CARE Instructors. Photo by Justin Wiggins

Forster Pond Courses are unique in that CARE staff partners with elementary school teachers to implement a two part instructional progression. The first part is completed by the teachers who integrate our fisheries knowledge based curriculum into their daily lesson plans. Teachers spend an average of six hours teaching CARE curriculum in their classrooms.

The second part is a field trip to the CARE Center where CARE staff and

certified instructors provide instruction on "fishing techniques", and then each student has the opportunity to fish in Forster Pond, which offers superb catch rates. Students come prepared with more advanced knowledge of fisheries science allowing for rapid advancement during field day modules.

Summer Fishing Classes are two and one half hour classes offered for seven weeks during the summer months, primarily in urban areas. These classes use interactive games to teach students in (summer) day-



Summer Fishing classes are offered over a 7-week period from June to August to day campers across the state. Whenever possible Summer Fishing staff will use a seine net with students, which enables the campers to get their hands on a variety of marine animals. Photo by Justin Wiggins

camps about aquatic environments, water quality, fish identification and ecology, safety, and angling skills. Each class includes a fishing experience. The main goal of the summer fishing class is to have contact with as many youth as possible, ultimately creating awareness and a large number of fishing "participants". The classes require one permanent staff for coordination and five seasonal employees for class delivery each summer. Cooperation of dependable, youth-group leaders was critical to convening successful classes.

Special Fishing Events encompass a wide variety of educational and angling activities including: municipal fishing clinics/derbies, Take a Vet Fishing days, Boy and Girl Scout fishing events, ice fishing events, fish ecology and habitat presentations, family fishing days, and fishing with persons with special needs. Some Special Fishing Events, such as No Child Left Inside® Family Fishing Days are able to incorporate some of the CARE topics from the Family Fishing Course.

Special Fishing Events are very popular with instructors as they are able to have contact with large numbers of people, they require less logistical coordination, and they are completed within one day.

The expected outcome of these Special Fishing Events is the creation of participants and an increase in environmental knowledge. This outcome is less than the creation of an angler/steward as expected from other CARE student activities. However, we feel this is a valuable component to make families aware of the CARE program, the different aquatic resources CT has to offer, and the inherent benefits fishing has to offer. In some Special Fishing Events, such as No Child Left Inside® Family Fishing Days, the expected outcome is creating the angler/steward student consequence as these events include all three components required to create



Hundreds of anglers joined CARE instructors for saltwater fishing day at Fort Trumbull State Park (*Top*). FREE Family Fishing Day has become our most popular event, attracting nearly 1,000 people annually (*Bottom*). Photos by Justin Wiggins



anglers: 1) attendance by parents and their children; 2) aquatic educational activities, and 3) a fishing trip.

Job 2 – Program Administration

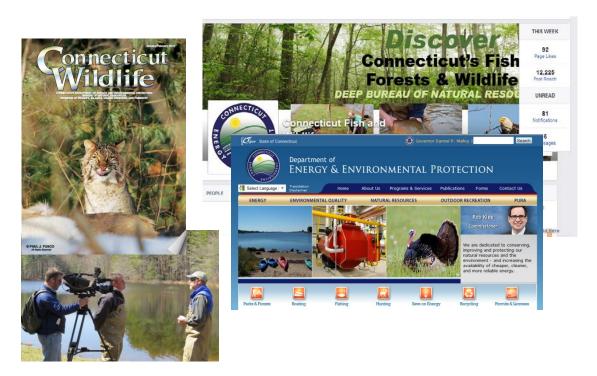
Program Administration is the second highest priority of the CARE program as we attempt to create 1) basic fishing *participants*; 2) more knowledgeable *anglers*, and 3) active *stewards* of aquatic resources. The top priority of Job 2- Administration is volunteer recruitment, training, and retention/reactivation. Administrative activities greatly facilitate smooth operation of the CARE program. Some of the more common administrative duties include:

- Continue to improve curriculum and develop relevant and compelling aquatic resources education materials
- Attend national meetings and present updates on the CARE program
- Recruit, train, perform background checks, certify, motivate, and retain qualified volunteers (>200 active annually) around the State to teach aquatic education classes
- Conduct additional training sessions for active certified volunteer instructors
- Maintain the CARE email listserv for electronic communication with volunteers to provide upcoming class opportunities and Fisheries updates
- Establish partnerships, schedule and coordinate student activities, and recruit new
 volunteers. Potential partners include municipalities, DEEP Office of Environmental
 Justice, DEEP Park Division Staff, Park and Recreation departments, Boy and Girl Scout
 groups, non-government organizations, schools, YMCAs, youth and family service
 groups, nature centers, Audubon centers, CT Bass Nation, Trout Unlimited and other
 angling groups, bait and tackle shops, marinas and other State agencies
- Coordinate Forster Pond course curriculum with teachers from 16-20 elementary school classrooms, schedule and host a field trip to the CARE Center for each class
- Compile, validate, and error check class information data sheets, volunteer time contribution datasheets, and student demographic data sheets
- Enter student and instructor data sheets into specially designed Microsoft Access database
- Coordinate DEEP and Fisheries media event participants
- Track Interaction time (IT)
- Purchase, distribute and maintain all education materials and field equipment needed for classes around the State
- Continually update design and maintain fisheries education trailer
- Supervise up to 5 seasonal Interpretive Guide employees

JOB 3 – Facilitation of Fisheries Outreach and Communications

Beyond typical supervisory duties such as program development, conducting performance evaluations and overall project coordination of both CARE Job 1 and Job 2, the CARE Project Leader position also provides oversight to other activities related to education and outreach primarily facilitated by other Fisheries staff. All of these tasks function to support recruitment, retention, and reactivation (R3) of anglers. Some specifics include:

- Educational displays at fairs, trade shows, and outdoor enthusiast events
- Manage CT FISH AND WILDLIFE social media Facebook, Twitter, and FishBrain pages
- Co-Editor Connecticut Wildlife Magazine
- Facilitate maintenance and development of Fisheries web pages
- Oversight of weekly fishing reports, press releases, and other educational materials
- Liaison with DEEP Office of Public Affairs
- Develop new and remodel existing Fisheries outreach strategies to better serve the majority of the citizens of Connecticut.
- Facilitate the Youth Fishing Passport Program
- Coordinate youth trout stocking events (trout in a bucket)
- Coordination of angler recruitment, retention, and reactivation (R3) efforts



Educating and providing information to the public about our fishing opportunities and CARE Student Activities is one of the roles facilitated by the CARE Project Leader.

Youth Fishing Passport- On December 1, 2012 DEEP launched the free "Youth Fishing Passport" program (www.ct.gov/deep/YFP) to introduce and connect youth, under the age of 16, with the many excellent fishing opportunities across Connecticut.

The Youth Fishing Passport (www.ct.gov/deep/yfp) is intended to support the CARE program as it parallels the main priority of CARE; to help promote environmental responsibility and stewardship. It encourages the youth to take an active role

in responsible fishing, increases awareness of fishing regulations, and makes them embrace being a true angler.

The ultimate goal of the Youth Fishing Passport program is to get kids and their families excited about fishing and make fishing an activity of choice. To achieve this goal, the Youth Fishing Passport program has activities to challenge youth, incentives to fish provided by the fishing industry, and a support framework which include learn to fish classes, sharing of fishing successes, and opportunities to remain engaged in fishing through a network of fishing related events.





The youth fishing passport provided to those under 12 years of age (left) and those between 12 and 15 years of age (right). The passport version on the right utilizes the same template that adult anglers receive when they purchase their fishing license. In Connecticut, those 12 and older can have a Jr. hunting privilege and safe boating certificate. Both of these privileges would be listed on the same print out. Those under 12 years old like the color images of common fishes of Connecticut.

Trout stocking with children and adults is an outreach activity that has become increasingly popular. The excitement of releasing fish into the wild has universal appeal for all ages. The information communicated by DEEP staff about trout rearing and stocking help the public better understand the role the Fisheries Division plays in fisheries management and the investment made by the State to provide a high quality trout angling experience. Capitalizing on this excitement, we have reproduced trout-in-a-bucket activities at pre-Opening Day media events, on Opening Day of trout season at several Trout Parks, and at both winter and spring *No Child Left Inside®* celebrations. Aside from the fun, stocking is a tangible way for people to assist DEEP with stewardship activities.

Key Findings

Job 1 - Student Activities Student activities are the primary core function of the CARE program as they have the greatest ability to create 1) basic fishing *participants*; 2) more knowledgeable *anglers*, and 3) active *stewards* of aquatic resources. Of the five types of student activities, Family Fishing Courses, followed by Family Ice Fishing classes, are the most effective at meeting the core function.

During the 2016 project segment, a total of 7,670 students were taught (Figure 1). *IT* had a value of 29,493 hours (Table 2).

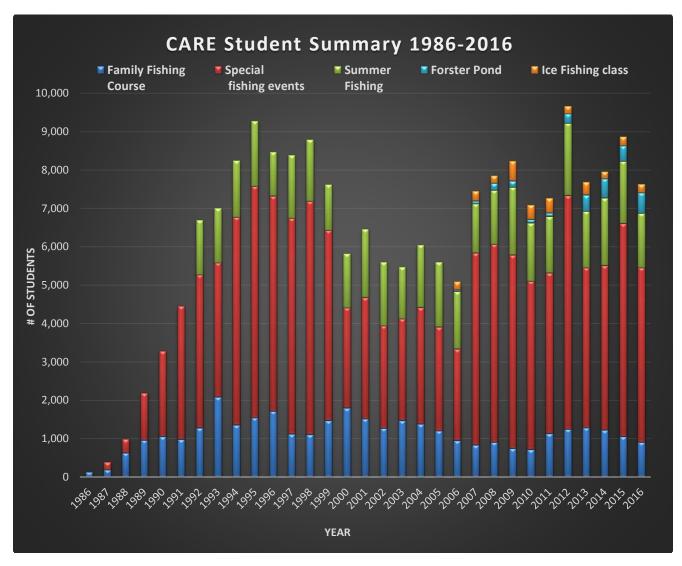


Figure 1. Stacked bars representing the number of CARE students from 1986-2016 within each of the five student activities.

"Let's Go Fishing" CARE published 10,000 copies of a 29-page full color Connecticut specific introduction to fishing workbook. This publication was modeled after the angler education workbook in Oklahoma and has greatly improved the messaging of the content taught in our Family Fishing Course.

Family Fishing Courses remained the primary class type for teaching students about fishing. In 2016, 907 students graduated Family Fishing Courses. While the number of students and classes has been greater since the switch from a 4-meeting course to a 2-meeting course, since 2014 both measures have decreased (Figure 2).

An evaluation was completed of Family Fishing Course students that participated in courses

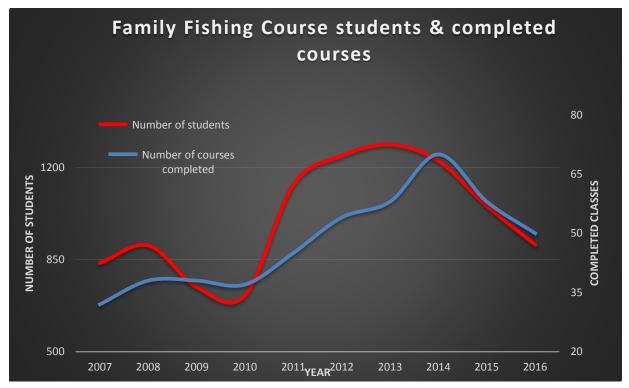


Figure 2. The number of students (red) and the number of courses (blue) since 2007.

from 2010-2014. By analyzing and comparing information provided in student registration cards and results from an email survey we summarized fishing behaviors pre and post-program. We know CARE is making a difference! The "Angling for the Future" report¹ summarizes, compares, and quantifies changes in fishing participation and behavior before and after attending a CARE

Family Fishing Course. Based on the comparison of CARE registration cards and the post-course survey (10.4% return) we now know that the CARE Family Fishing Course:

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¹ Angling for the Future: A Comparison of Knowledge, Skill, and Participation Before and After Taking A CARE Family Fishing Class. 2015. Wiggins, J., Bourret, T. and Beauchene, M. CT Department of Energy and Environmental Protection.

CARE Students Rank Top Five Nationally*

Following participation in a CARE course, our students:

Self-identified themselves as an angler;

Had an increased interest in fishing;

Increased fishing participation (both freshwater and saltwater);

Learned a lot about tackle & methods;

Had confidence in their ability to go fishing again;

Identified places to go fishing;

Understood the term Fisheries Management;

Obtained fishing equipment.

* 2011 National Wild Turkey Foundation and Responsive Management National Report (www.responsivemanagement.com/download/repors/R&R Evaluation Report.pdf).

- Is successful at reaching our target audience
 families with little to no prior fishing
 experience
- Represents the demographics of CT's population
- Provides the knowledge and skills so graduates are confident to fish on their own.
- Motivates people to fish and fish more often
- Produces graduates who purchase fishing equipment and many purchase fishing licenses
- Has graduates who regularly purchase a fishing license
- Produces participants, anglers, and stewards

Family Ice Fishing classes were the second most effective student activity for creating an active steward of environmental resources. 223 students attended Family Ice Fishing classes in 2016. Unfortunately, due to a record warm winter in 2016 and lack of safe ice, both the Family Ice Fishing Derby and Winter Festival were cancelled and they were not able to implement their new fishing skills.

Forster Pond Courses participation reached a new high in 2016. A total of 533 students (19 field trips days) attended which is a dramatic increase from the 96 students who attended in 2011 (the first year of the course). Based on current staffing, CARE has nearly maximized use of the CARE education center for school-day field trips during May and June.

Fishing success was very high for students, with over 90% catching at least one fish. Special needs student populations were integrated into these classes. For the first time, a "Family Fishing Night" was established for 2016 Forster Pond Course graduates, where students could register and attend a follow up fishing event with their entire family to a local waterbody following their field trip. This "Family Fishing Night" attracted 45 participants!

Summer Fishing classes reached 1,421 students during the summer of 2016. All 1,421 day campers that participated in the Summer Fishing program went on a fishing trip! For the first time in Summer Fishing history, municipal partners had to cancel several classes due to High Heat Warnings posted by the Connecticut Department of Public Health.

Special Fishing Events are generally short-term duration (a few hours during one day) and require the least amount of planning for instructors. Due to these factors and a supportive "fishing-festival" type atmosphere, these types of events often generate the greatest number of students (4,548) and *IT* (15,529 hours). Special Fishing Events are convenient and popular with the public and instructors alike. Special Fishing Events serve as a valuable media outlet tool for garnering television and newspaper coverage of our programs.

Table 2. Participation statistics for key metrics related to the five CARE Student Activities for the 2016 reporting period.

	Family Fishing	Ice Fishing	Forster Pond	Summer Fishing	Special Fishing Event	Total for 2016
# Students	907	223	533*	1,421	4,548	7,632
IT	4,566	542	5,330*	3,526	15,529	29,493
# Classes	50	13	19*	54	54	190

^{*}a new high value for the CARE program

The total number of CARE students taught and *IT* hours decreased slightly from 2015 to 2016. The cancellation of two large scale ice fishing events (Winter Festival and Family Ice Fishing Derby) in 2016 due to a historically mild winter resulting in a lack of safe ice had a significant influence in students and *IT* being down.

IT illustrates there is more effort dedicated to our CORE products, Family Fishing Courses and Forster Pond courses, versus the Special fishing events than would be evident by examining student numbers alone (Figure 3).

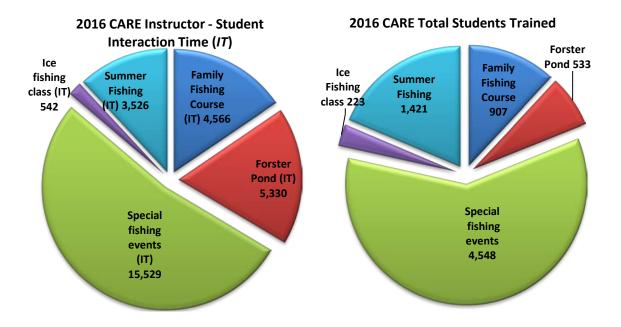


Figure 3. Comparison of 2016 CARE Instructor-Student IT and number of students trained.

Geographic Coverage: During 2016, CARE had at least one type of student activity in all counties of the state (Figure 4). Efforts in 2016 to increase classes in the northwestern and far eastern portions of the state proved successful, with more offered in these regions this past project period than in past years.

CARE Fishing Activities by Town for 2016

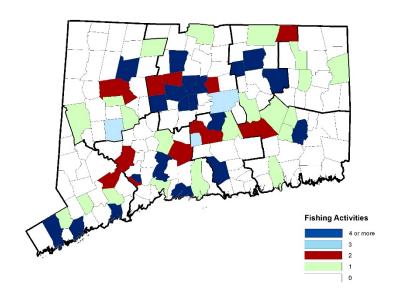


Figure 4. Number of total CARE courses per town in 2016

We had good distribution of Family Fishing Courses across the entire state (Figure 5). Several Family Fishing Courses were offered in all counties, although fewer in Eastern Connecticut than any other region.

As recommended in previous
Performance Reports, staff must
continue to increase efforts to
offer classes in the Eastern parts
of Connecticut. During 2017, we
will continue to work on
increasing CARE opportunities
and activity in both the Eastern
and Northwest portions of the
state by soliciting partnerships with
municipalities and recruiting volunteer
instructors to deliver courses.

CARE Family Fishing Courses by Town for 2016

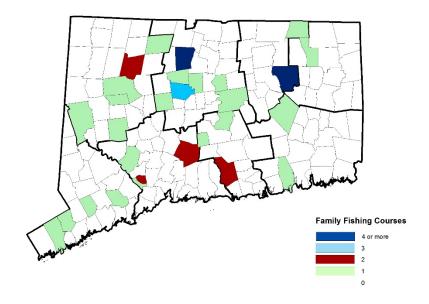


Figure 5. Number of Family Fishing Courses per town in 2016

Job 2 – Program Administration

Volunteer time provided 100% of state "matching" funds needed for federal funding for the 30th straight year. Over 30 years, CARE volunteers have donated the equivalent of \$4.35 million to the DEEP (Appendix A). Volunteer recruitment, training, and supervision remain our top priorities. Highlights from Job 2- Program Administration were:

- 174 Instructors volunteered 3,306 hours;
- 190 classes and events occurred in 55 different towns and cities;
- \$166,266 equivalency in state "matching" funds were generated;
- 7,670 students were inspired to fish;
- IT value of 29,493 hours for student activities;
- IT value of 158 hours for volunteer training programs;
- Six (6) new Instructors were recruited and trained;
- In-service Trainings attended by 32 certified volunteers.

Several impressive milestones for CARE of the 30 years of the program include:

- CARE volunteers have donated the equivalent of \$4.35 million in volunteer services to the DEEP;
- Instructors have taught 197,000 citizens;
- Over 2,000 volunteers have instructed at CARE events;

"Let's Go Fishing Instructor Resources" were developed to increase standardization in the presentation and content of courses as well as to boost instructor confidence. These new resources include a PowerPoint presentation and an Instructor's Guide. The PowerPoint was created to focus the attention of students in classrooms and to augment the content of the "Let's Go Fishing" workbook. The step-by-step "Instructor's Guide" was developed to help instructors navigate the PowerPoint presentation. These Instructor resources are color-coded and the content is synchronized to simplify course delivery. These resources are available on our website at www.ct.deep/CARE.

JOB 3 – Facilitation of Fisheries Outreach and Communications

Oversight of Fisheries staff as well as coordination of education and outreach activities outside of CARE but within Fisheries included;

- "Fisheries Education Trailer" was exhibited at all CARE center courses and six events gathering attention from thousands of viewers. The trailer displays fish taxidermy along with posters and a 70-gallon aquarium. The layout is easily modified to support a wide range of fisheries and fishing related content.
- Participation in the national working group that produced "Recommendations and Strategic Tools for Effective Angler Recruitment,
 Retention and Reactivation (R3) Efforts", a work product of the partnership between the Aquatic Resources Education Association and the Recreational Boating & Fishing Foundation (AREA/RBFF 2016)





Deputy Commissioner Susan Whalen with Derek Angel, the winner of the 2017 Angler's Guide Photo contest. The unveiling ceremony was held at the No Child Left Inside® Winter Festival.

- Supervised the development of an interactive trout stocking map application
- Co-Developed an <u>interactive fish community map</u> with the University of Connecticut's Center for Landuse Education and Research
- TV, Radio and print coverage of Fisheries topics of interest
- Reviewed and updated the <u>2017 Connecticut Angler's Guide</u>, including the selection of Angler's Guide Cover contest winner from over 200 submitted photos
- Assisted FD staff with education and outreach opportunities
- Conducted surveys to evaluate Fisheries social media efforts, free fishing license days, and to improve fishing in CT.
- Facilitated the <u>Youth Fishing Passport Program</u> (1,246 registrants in 2016)
- Compiled and published the <u>annual fish stocking report</u>
- Hosted the annual <u>Trophy Fish Awards</u> recognition ceremony



"Trout-in-a-bucket" occurs at various high profile events throughout the year including; pre-opening day and opening day of trout season at several Trout Parks, and at both winter and spring No Child Left Inside® celebrations. Fisheries and the Office of Public Affairs work to have state and local leaders present to "assist" DEEP Commissioner Rob Klee and school children stock a local waterbody.

Moving Forward

- Increase outreach/recruitment efforts by expanding the use of social media platforms
- Emphasize that 100% of fees from fishing and hunting licenses go to support fish and wildlife programs.
- Perform much needed repair to CARE Center infrastructure and fishing access points and facilities
- Develop and implement instructor recruitment, retention, and reactivation (R3) strategies
- Based upon positive reviews from participants, continue to offer free fishing courses for females in 2017, specifically; "Mom and Me" and "Women Only" events. Other outdoor

programs implemented around the country have been successful at encouraging females to participate in outdoor activities.

- Promote volunteer opportunities in areas of Connecticut lacking activities (see Figures 4 and 5)
- Assess CARE student activities using the "R3 Outdoor Recreation Model" developed by Aquatic Resources Education Association (AREA) and Recreational Boating and Fishing Foundation (RBFF) https://www.takemefishing.org/getmedia/4d891d05-348f-40b0-962f-3df34b5cc0a7/AREA-RBFF-Angler-R3-Recommendations November-2016
- Maximize courses with teachers in schools around the State who will utilize Forster
 Pond and the CARE Center for their fishing training and field experience
- Implement and evaluate a follow up fishing event for students who attend Forster Pond Courses on field trips. We will invite them to attend a "Family Fishing Night" at a water body within their community. Seek partners to sponsor "Family Fishing Night" events.

Project Costs

Total Project Cost: \$497,766 Federal Share: \$373,324

State Share: \$124,442 (Value of volunteer in-kind contributions)

References

Aquatic Resources Education Association and Recreational Boating and Fishing Foundation. 2016. *Recommendations and Strategic Tools for Effective Angler Recruitment, Retention, and Reactiveation (R3) Efforts.* https://www.takemefishing.org/getmedia/4d891d05-348f-40b0-962f-3df34b5cc0a7/AREA-RBFF-Angler-R3-Recommendations November-2016

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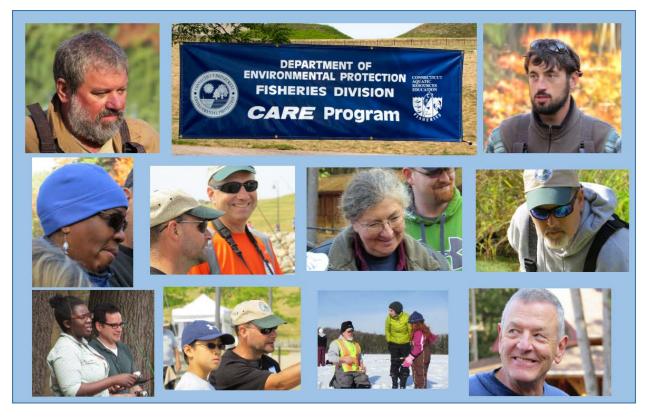
Acknowledgements

The CARE program staff would like to thank all active certified volunteers (Table 3) and their teaching team members for another successful year. CARE volunteers have shown dedication towards producing new anglers, promoting aquatic education, and creating environmental stewards for 30 years. Additional thanks to our *Summer Fishing* staff: Keith Syrett, Anthony Kaczmarek, Stephen Russon, Matt Rieger, and Scott Thibault for their excellent work ethic and positive attitude. They persevered while maintaining excellent morale while performing duties during long work days and oppressive summer heat and humidity.



During 2016, the late Richard Emmons, Marianne Kozikowski, and Tim Irwin surpassed the 15-year mark as a CARE instructor. As such, we acknowledge them in the 2017 CT Angler's Guide (above). Congratulations and thank you for your dedication and combined donation of over 2,000 hours of volunteer time and reaching over 13,500 students!

WE CARE!



Some of the extremely dedicated people who help introduce so many people to the benefits of fishing. We CARE about fishing.

Table 3. The active CARE volunteer instructors (and total years with CARE) during the 2016 reporting period. Active is defined as having participated in at least one CARE activity within the past two years (sorted descending by the greatest number of years).

Instructor	Number of Years
GEORGE BABEY	31
BOB SMITH	30
DAVE MAJORS	30
FRANK KUCHARSKI	30
JOHN DELAURENTIS	30
LIONEL MACDONALD	30
JEFF ROGALA	28

JOHN TUCKER	28
TONY RECCHIA	28
DIANNE GRENIER	27
THOMAS MEGARGEE	27
VINCENT LAVORGNA	27
HARRY COYLE	24
JOE HAINES	22
TOM BLEJEWSKI	22
DAVID SACCHITELLA	20

ED RUEL	20
JOSEPH PERRY	20
JEAN RIES	18
RAY POTKAY	18
RUSSELL HALL	18
STAN GRABOWSKI	17
LENNY TUBBS	16
MICHAEL MADER	16
SUE QUINCY	16
MARIANNE KOZIKOWSKI	15
RICHARD EMMONS (LATE)	15
TIM IRWIN	15
CASSIE DUBRULE	14
KEVIN FULLER	14
PAUL GRAY	14
BOB MANGIONE	13
JOHN BARR	13
TOM NICHOLS	12
DONNA ROSE SMITH	11
GRACE JACOBSON	11
JAN DARULA	11
DAVID CASKO	10
DORIS JOHNSON	10
JOHN ORTOLEVA	10
JOHN RYAN	10
JONATHAN BOISFEUILLET	10
JOSEPH ARNSON	10
MARTY ARMSTRONG	10
MAUREEN SCINTO	10
RON GRAZIANI	10
GEOFF PICARD	9
JIM MURTAGH	9

JUDITH WITZKE	9
LOREEN LAWRENCE	9
PAUL DONA	9
RACHEL SUNNY	9
DAVID CONNELLY	8
ED ALBRECHT	8
ED OCHMAN	8
TOM FRILLICI	8
BILL HAMMEL	7
CHELSEA OCHMAN	7
JEFF ARNSON	7
JIM HAWKS	7
JOHN MORRESI	7
RICH CARTER	7
SIMON PHILLIPS	7
ADRIANA NIXON	6
AMBER MCDONALD	6
CHRIS DEFORGE	6
DIANNE PARMALEE	6
JOHN STRILLACCI	6
MARTIN WIGGLESWORTH	6
RUSSELL ZELANIN	6
AMBROSE SMURRA	5
BRUCE TUBBY	5
CHARLES MACMATH	5
HUGH MCCUTCHEN	5
KEVIN MAHER	5
RICK HUNTLEY	5
WAYNE GUSTAFSON	5
AMY POTURNICKI	4
GARY ANDERSON	4
LENA LAVOIE	4

MICHAEL MARSULLO, JR.	4
NEIL GILLEY	4
RAY LOZADA	4
ROB POTURNICKI	4
RYAN NOBREGA	4
SCOTT MCCALL	4
TONY RECCHIA JR	4
ANDREW HALLY	3
ARMAND FORTIER	3
DEAN RUSTIC	3
DOUG FARROW	3
JAMES SHIRLEY	3
JASON DUBREUIL	3
JEFF GLENNIE	3
JOE WHEWELL	3
JOHN KADOW	3
PAUL BEAUCHENE	3
ROBERT HARTLEY	3
ROBERT SCHIFFMAN	3
ANDREW SNINSKY	2
BRIAN CATLIN	2
BRIAN KIRBY	2

COLBY MCMAHON 2 DAVID DAVISSON 2 EVAN THOMPSON 2 JAMES PARKINS 2 JIM WOODWORTH 2 JOHN LAGOSZ 2 KEITH SYRETT 2 KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	CHRIS PULLANO	2
EVAN THOMPSON 2 JAMES PARKINS 2 JIM WOODWORTH 2 JOHN LAGOSZ 2 KEITH SYRETT 2 KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	COLBY MCMAHON	2
JAMES PARKINS JIM WOODWORTH JOHN LAGOSZ KEITH SYRETT KEVIN GALLAGHER LUIS ORGANISTA MICHAEL JASENSKY NATE GORRY NICK MOHNKERN TRACY SEIGLE GARY LUNDIN JASON COLEMAN MICHAEL MCKENNA MICHAEL MCKENNA NEAL SPENCER 2	DAVID DAVISSON	2
JIM WOODWORTH 2 JOHN LAGOSZ 2 KEITH SYRETT 2 KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	EVAN THOMPSON	2
JOHN LAGOSZ KEITH SYRETT 2 KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE GARY LUNDIN JASON COLEMAN MICHAEL MCKENNA 1 NEAL SPENCER 1	JAMES PARKINS	2
KEITH SYRETT 2 KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	JIM WOODWORTH	2
KEVIN GALLAGHER 2 LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	JOHN LAGOSZ	2
LUIS ORGANISTA 2 MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	KEITH SYRETT	2
MICHAEL JASENSKY 2 NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	KEVIN GALLAGHER	2
NATE GORRY 2 NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	LUIS ORGANISTA	2
NICK MOHNKERN 2 TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	MICHAEL JASENSKY	2
TRACY SEIGLE 2 FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	NATE GORRY	2
FRANK SEGALINE 1 GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	NICK MOHNKERN	2
GARY LUNDIN 1 JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	TRACY SEIGLE	2
JASON COLEMAN 1 MICHAEL MCKENNA 1 NEAL SPENCER 1	FRANK SEGALINE	1
MICHAEL MCKENNA 1 NEAL SPENCER 1	GARY LUNDIN	1
NEAL SPENCER 1	JASON COLEMAN	1
	MICHAEL MCKENNA	1
DICHARD MANICIONE 4	NEAL SPENCER	1
KICHAKU IVIANGIUNE 1	RICHARD MANGIONE	1
ROBERT PASK 1	ROBERT PASK	1

Appendices

APPENDIX A - CARE Instructor Volunteer Time Value 1986 - 2016

CARE Instructor Volunteer Time Value 1986 - 2016

Year	Certified Non-Certified Volunteer Rate/HR Volunteer Rate/HR Year Hours (Bio/Rate) Hours (Tech/Rate)							
1986	7.00.0	(2.0)	. tatoj	110410	(1001	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Value
1987	1,813	\$	13				\$	23,569
1988	2,307	\$	13				\$	29,991
1989	3,419	\$	17				\$	58,123
1990	4,020	\$	20				\$	80,400
1991	4,260	\$	23				\$	97,980
1992	5,537	\$	25				\$	138,425
1993	4,235	\$	26				\$	110,110
1994	3,898	\$	28				\$	109,144
1995	3,564	\$	28				\$	99,792
1996	3,551	\$	29				\$	102,979
1997	2,704	\$	30				\$	81,120
1998	4,257	\$	32				\$	136,224
1999	3,639	\$	33				\$	120,087
2000	3,711	\$	35				\$	129,885
2001	3,375	\$	35				\$	118,125
2002	3,179	\$	36				\$	114,444
2003	2,916	\$	37				\$	107,892
2004	4,091	\$	38				\$	155,458
2005	3,294	\$	38				\$	125,172
2006	4,270	\$	41				\$	175,070
2007	5,391	\$	45				\$	242,595
2008	5,142	\$	49				\$	251,958
2009*	3,362	\$	51	1,353	\$	41	\$	226,935
2010	3,758	\$	52	1,749	\$	42	\$	268,874
2011	2,987	\$	54	1,509	\$	44	\$	227,694
2012	2,994	\$	50	1,539	\$	40	\$	211,260
2013	2,833	\$	54	1,361	\$	43	\$	211.505
2014	2,991	\$	53	1,283	\$	42	\$	212.409
2015	3,089	\$	53	1,414	\$	42	\$	223.105
2016	2,188	\$	54	1,118	\$	43	\$	166,226
Totals	106,775			11,326			\$ 4	4,356,551

^{*}US Fish and Wildlife Service requested we distinguish and report separately Certified and Non-Certified Instructor Hours

Rate for Certified Instructor = Fish Biologist 1; and Non-Certified = Fisheries Technician

APPENDIX B – CARE Student Breakdown by Student Activity from 1986-2016

Year	Total Students	Total Interaction Hours (<i>IT</i>)	Family Fishing Course	Family Fishing Course (IT)	Forster Pond	Forster Pond (IT)	Special fishing events	Special fishing events (IT)	Ice Fishing class	Ice fishing class (IT)	Summer Fishing	Summer Fishing (<i>IT</i>)	Instructor Training
1986	125		125				-				-		-
1987	443		187				201				-		55
1988	1,036		630				353				-		53
1989	2,262		963				1,221				-		78
1990	3,413		1,056				2,229				-		128
1991	4,546		977				3,478				-		91
1992	6,807		1,278				3,989				1,430		110
1993	7,084		2,085				3,498				1,420		81
1994	8,298		1,360				5,408				1,480		50
1995	9,377		1,544				6,029				1,700		104
1996	8,541		1,714				5,609				1,150		68
1997	8,420		1,120				5,625				1,640		35
1998	8,842		1,106				6,077				1,610		49
1999	7,663		1,472				4,957				1,196		38
2000	5,862		1,798				2,612				1,407		45
2001	6,501		1,516				3,163				1,784		38
2002	5,677		1,275				2,662				1,661		79
2003	5,508		1,472				2,651				1,348		37
2004	6,104		1,381				3,039				1,628		56
2005	5,656		1,206				2,705				1,689		56
2006	5,170	18,517	951	7,317	40	320	2,389	6,850	212	767	1,495	3,263	83
2007	7,512	26,964	837	10,180	73	491	4,999	13,057	261	563	1,285	2,673	57
2008	7,932	23,409	904	7,451	179	1,806	5,160	10,131	202	504	1,410	3,517	77
2009	8,269	24,046	746	6,828	160	1,474	5,039	10,934	514	1,216	1,766	3,594	44
2010	7,199	23,922	714	7,077	88	980	4,386	11,194	381	1,140	1,522	3,531	108
2011	7,335	21,578	1,134	6,790	96	1,090	4,179	9,261	384	1,263	1,472	3,174	70
2012	9,711	31,546	1,244	7,190	245	3,625	6,093	16,008	202	543	1,880	4,180	47
2013	7,726	31,677	1,287	7,770	425	4,691	4,170	15,561	332	865	1,466	2,790	46
2014	8,019	32,579	1,225	6,558	498	4,922	4,288	17,155	184	498	1,758	3,446	66
2015	8,946	35,417	1,054	6,469	398	3,980	5,554	21,071	244	653	1,622	3,244	74
2016	7,670	29,493	907	4,566	533	5,330	4,548	15,529	223	542	1,421	3,526	38
Totals	197,654		35,268		2,735		116,311		3,139		38,240		1,961