



Connecticut Aquatic Resources Education (CARE)

Synopsis of activity and key findings

Federal Aid in Sport Fish Restoration F-64-E-30

Annual Performance Report – F18AF00134

1/1/2018 to 12/31/2018

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January 2019



Overview: Since 1986¹, 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. For more about the CARE program visit our [webpage](#)².

Specifically the CARE program strives to:

- Provide the knowledge and skill to motivate people to fish
- Increase public awareness of aquatic resources
- Promote environmental stewardship and 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.



Key Findings

The CARE program and its highly dedicated certified fishing instructors are pleased to report that since 1986:

- Volunteers have donated the equivalent of \$4.75 million in volunteer services to the DEEP.
- Instructors have taught over 212,000 students.
- Over 2,100 volunteers have contributed their knowledge and time at CARE events.

¹ Connecticut General Statutes Section [26-31a](#)

² www.ct.gov/deep/fishingclasses

Specifically for 2018

- 7,318 total students were taught across all CARE activities (Figure 1).
- Student-Instructor Interaction Time (IT)³ was 34,365 hours (Table 1).
- 180 class events occurred in 59 different towns and cities (Figure 2).
- 195 Instructors Volunteered 3,851 hours.
- 20 new instructors were trained and certified into the CARE program.

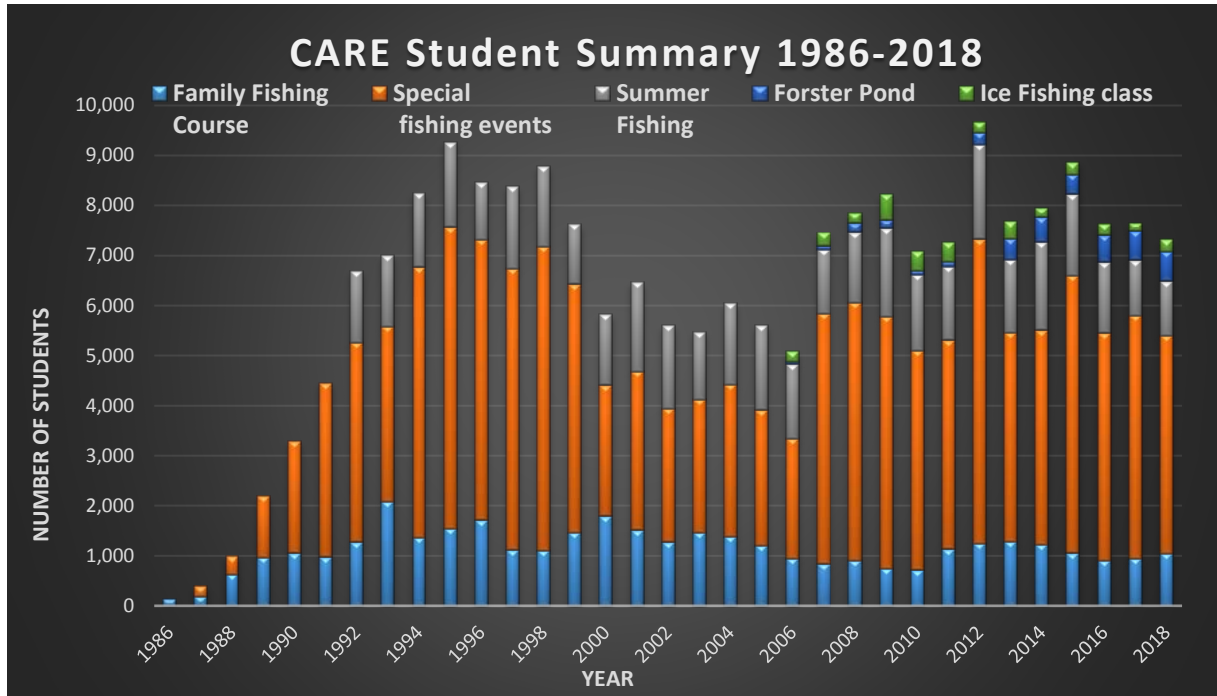


Figure 1. Stacked bars representing the number of CARE students from 1986-2018 within each of the five student activities.

Table 1. Participation statistics for key metrics related to the five CARE Student Activities for 2018.

	Family Fishing	Ice Fishing	Forster Pond	Summer Fishing	Special Fishing Events	Total for 2018
Total Students	1047	232	599*	1,084	4,356	7,318
Interaction Time (IT)³	4,897	737	5,798	2,500	20,536	34,468
Number of Classes	45	12	21*	51	51	180

*a high value for the CARE program

³ Interaction Time (IT) is a metric CARE uses to evaluate contact time with students. IT is the number of course hours multiplied by the number of students.

Details about our student activity effort in 2018

CARE Fishing Activities per Town - 2018

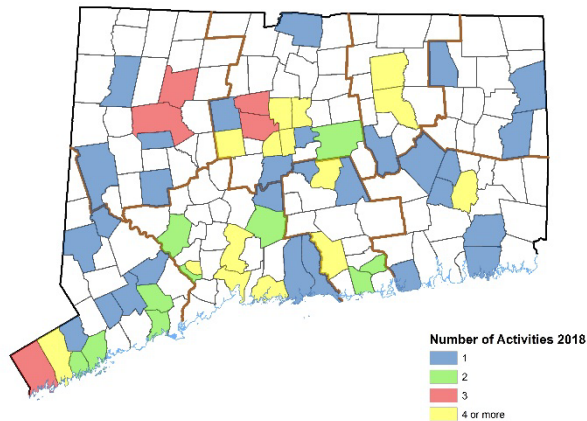


Figure 3. Number of total CARE fishing activities per town in 2018.

CARE Family Fishing Courses per Town - 2018

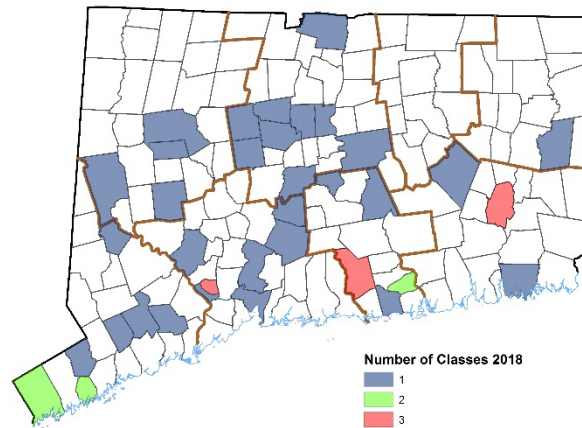


Figure 4. Number of Family Fishing Courses per town in 2018.

CARE Student Activities: A total of 180 fishing activities offered in 2018 spread across all counties of Connecticut (Figure 3).

- **Family Fishing Course:** A total of 1,047 students participated in these two part courses which consist of 1) two hours of classroom instruction and 2) a fishing trip. Family Fishing Courses were offered in all counties of Connecticut (Figure 4). An evaluation was completed of Family Fishing Course students that participated in courses 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” report⁴ summarizes, compares, and quantifies changes in fishing participation and behavior before and after attending a CARE Family Fishing Course.
- **Introduction to Ice Fishing:** A cold winter in 2018 afforded a long, safe ice fishing season in CT. CARE Ice Fishing classes attracted 232 students. Three of these classes included an ice fishing trip. Additionally, all students were invited to the annual CARE and DEEP State Parks - No Child Left Inside® *Winter Festival* family event, which attracted 1,200 participants for a day of ice fishing and cold weather outdoor activities!
- **Forster Pond Courses:** Participation continued to grow and reached a new high in 2018. A total of 599 students (21 field trip days) attended a field trip to the CARE Center on

⁴ 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.

Forster Pond, which is a dramatic increase from the 96 students in 2011 (the first year of this course offering).

- **Summer Fishing classes:** A total of 1,084 day campers were taught during the summer of 2018 with every student going on a fishing trip.
- **Special Fishing Events:** The most attended CARE student activity reached a total of 4,356 participants for 2018. These classes and events vary widely in educational content and duration, but usually include a fishing trip. They continue to be very popular with Instructors and students alike. Examples include Family Fishing Day, *Take A Vet Fishing* programs, *Winter Festival Ice Fishing* event, and the Saltwater Family Fishing event.



Moving Forward

- Increase outreach/recruitment efforts by expanding the use of social media platforms to increase awareness of the products offered by the CARE program.
- 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.
- Develop and implement recruitment, retention, and reactivation (R3) strategies for our volunteer instructors.
- Based upon positive reviews from participants, continue to offer free “Women Only” fishing courses for females in 2019. Other outdoor programs implemented around the country have been successful at encouraging females to participate in outdoor activities.
- Continue to grow and promote volunteer opportunities in areas of Connecticut lacking activities (see Figures 3 and 4), especially the Eastern and Northwest portions of the state by soliciting partnerships with municipalities and recruiting volunteer instructors to deliver courses.
- CARE student activities were mapped using the “R3 Outdoor Recreation Model” developed by Aquatic Resources Education Association (AREA) and Recreational Boating

and Fishing Foundation (RBFF)⁵ (Appendix B). Develop new course offerings based on R3 assessment. For example:

- Expand new “Specialized Fishing Courses” focused on specific topics (e.g. Introduction to Trout Fishing, Introduction to Bass Fishing, Fly Fishing) to help beginner anglers advance their skills and confidence.
- Increase offerings of additional classes, fishing trips, or events to graduates of our introductory classes in order to provide support for continued fishing participation.
- Survey and evaluate students who attend Forster Pond Courses on field trips.
- Begin contacting students with via email immediately after participation in CARE classes in an effort to maintain relevancy and make aware of:
 - Electronic Weekly CT Fishing Reports and Newsletters
 - On-line interactive CT fishing maps and resources
 - Future CARE events and classes
- Continue to 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.

Funding



Total Estimated Project Cost: \$503,555

Federal Share: \$377,666

State Share: \$125,889 (Value of volunteer in-kind contributions)

More about CARE

The CARE program is successful largely due to the dedication of hundreds of fishing enthusiasts, willing to invest some of their time to pass on their knowledge, interest, and passion. To join our team, or for more information about the CARE program, email Tom.Bourret@ct.gov or Justin.Wiggins@ct.gov or call by phone at **860-663-1656**. On the web at www.ct.gov/deep/fishingclasses

⁵ https://www.takemefishing.org/getmedia/4d891d05-348f-40b0-962f-3df34b5cc0a7/AREA-RBFF-Angler-R3-Recommendations_November-2016



Fishing Resources

The Fisheries Division is here for you. We thank you for your support as 100% of your investment in a fishing license goes to the DEEP Bureau of Natural Resources to support Fish and Wildlife programs ([CGS 26-15, 26-15a, 26-15b](#)).

Web content:

[Fishing Guide](#): Our annual publication for all things fishing in CT.

[Current Stocking Report](#): A listing of stocking over the past several weeks.

[Weekly Fishing Reports](#): Our weekly publication about fishing condition in CT.

[Fisheries Management Programs](#): Information about our current fisheries programs.

Interactive Maps:

[Saltwater Fishing Map](#): Shows places to fish, launch a boat, hire a Party /Charter Vessel, or locate a bait and tackle shop.

[Trout Stocking Map](#): shows the number of days since the last stocking

[CT is Fishy](#): a series of interactive maps that cover general fishing information, fish species, and where to fish.

E- newsletters and reports:

[Opt-In](#) (link) to CT Fishin' Tips and the Weekly Fishing report www.ct.gov/deep/newslettersubscription

Social Media: www.facebook.com/ctfishandwildlife
<https://twitter.com/CTFishingInfo>
<http://fishbrain.com/>



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Appendix A: 2014-2018 Federal Sport Fish Restoration Grant *SMART* Objectives (**in bold**) and resulting outcomes for 2018 project period.

Job 1 - Student activities: Family Fishing Courses, Forster Pond Courses, Family Ice Fishing Classes, Summer Fishing Classes, and Special Fishing Events. 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. Each type of student activity differs with the content of instruction, interaction time (*IT*), and the instruction location. The variety of content and delivery of the student activities enables the CARE program to engage participants and have several levels of outcome, ranging from creating a participant who simply gains basic fishing skills and awareness, to development of a steward who cares for our aquatic resources. Unless otherwise noted, information presented was conducted during the 2018 project period.

- **Family Fishing Courses will meet and/or exceed the five-year average of 1,025 students and 7,131 interaction time hours.**
 - A total of 1,045 students were taught with 4,897 *interaction time* hours. Total students taught exceeded smart objective goal while the *interaction time* value fell short. A total of 45 courses were completed and only 2 cancelled due to low enrollment. Working with partners to promote courses through strategic advertising has benefited participation and reduced cancelled courses.

- **Family Ice Fishing Classes will meet and/or exceed the five-year average of 363 students and 1,005 interaction time hours.**
 - A total of 232 students were taught with 737 *interaction time* hours, both values fell short of the smart objective goal. However, staff has redirected effort on scheduling more weekend classes that include an on-ice fishing trip to immediately follow the 2-hour classroom lesson. For 2018, three classes included an ice fishing trip. All ice fishing class participants were invited to attend the annual CARE *Winter Festival* and practice their new ice fishing skills.
- **Forster Pond Courses will meet and/or exceed the five-year average of 203 students per year and 2,372 interaction time hours per year.**
 - A total of 599 students were taught with 5,789 *interaction time* hours, both values greatly exceeding the smart objective goal. Forster Pond Courses are extremely popular with students and teacher alike, as we host the same schools year after year. We have expanded the number of field trips we can host to capacity.
- **Summer Fishing Classes will meet and/or exceed the five-year average of 1,621 students and 3,454 interaction time hours.**
 - A total of 1,084 students were taught with 2,500 *interaction time* hours, both values fell short of the smart objective goal. Seasonal staffing level for Summer Fishing classes has decreased by 20% (from 5 staff to 4) since 2017, resulting in the need to schedule smaller classes with less students for safety reasons. The four seasonal positions are now longer in duration than previous years (currently 12 week vs traditional 8 week positions), allowing us to conduct Forster Pond Courses in May and June.
- **Special Fishing Events will meet and/or exceed the five-year average of 4,773 students per year and 12,952 hours each year.**
 - A total of 4,356 students were reached which did not meet smart objective goal, while the 20,536 *interaction time* hours greatly exceeded the smart objective goal. This high *interaction time* reveals that Special Fishing Events are being held for longer duration than when SMART OBJECTIVES were set. Special Fishing Events continue to be very popular with the public and volunteer Instructors as they usually include a fishing trip and are often conducted in a fun festival like environment.

Job 2 –Administration is the second core function of the CARE program and greatly facilitates smooth operation. Secondly, since 100% of State match is provided by volunteer hours, the recruitment, training, and support of a dedicated core of volunteers is critical. Unless otherwise noted, information presented was conducted during the 2018 project period.

- **Continue to modify curriculum and develop relevant and compelling fishing education materials**
 - Created an Ice Fishing Class PowerPoint to complement the Family Fishing Course PowerPoint and *Let's Go Fishing* student workbook (introduced in 2015).
 - Completed and implemented several instructional videos into the curriculum (with the help of volunteer Instructors).
- **Actively participate in the “Aquatic Resources Education Association” (AREA), a national group of professionals, and USFWS Region 5 Aquatic Educator meetings to ensure the most current aquatic education strategies are implemented in Connecticut**

- CARE Supervisor attended the AREA bi-annual National Conference in Lake Tahoe, CA in fall 2018.
- **Recruit, train, and certify 20 new instructors by conducting two instructor certification trainings per year, totaling 100 new instructors through each AFA project period**
 - Twenty new Instructors were certified.
- **Retain and supervise ~250 qualified volunteer instructors annually**
 - 203 volunteer Instructors participated in CARE events.
- **Conduct one in-service training for active certified volunteer instructors per year**
 - The instructor in-service training was held on December 9, 2018 focusing on marine fishing. Thirty-four CARE instructors attended and walked away with an increased appreciation for the complex process for developing or modifying marine fishing regulations.
- **Maintain frequent and timely communication with volunteers through CARE email listserv regarding upcoming class opportunities and Fisheries updates**
 - CARE updated volunteers about CARE news/activities by email, biweekly throughout the year and weekly during the busiest seasons. Survey responses from the instructors were overwhelmingly positive indicating that communication from CARE is excellent.
- **Establish partnerships with municipalities and non-governmental organizations to schedule and coordinate student activities**
 - Staff partnered and worked with a broad array of government organizations, NGO's, Conservation groups, municipal organizations, and non-profits resulting in 180 CARE activities being offered in 59 towns.
- **Coordinate Forster Pond Courses with teachers from 12-15 elementary school classrooms including a field trip to the CARE Center for each class**
 - 21 elementary school classrooms (599 students) visited the CARE Center for field trips.
- **Purchase, distribute and maintain all education materials and field equipment needed for classes around the State**
- **Supervise 6 seasonal Interpretive Guide employees plus summer interns**
 - Four seasonal Interpretive Guides were hired and supervised. This was a reduction in prior staffing levels, however, the remaining positions are now longer in duration. This change was necessitated by the increase in Forster Pond Course field trips in May which has created a demand for seasonal staffing earlier in year.

Job 3 –Supervision of Outreach is primarily the task of the project leader who oversees several Fisheries staff responsible for various outreach and communications activities in addition to typical supervisory duties such as scheduling staff time, conducting performance evaluations, and overall project coordination of both Job 1 and Job 2. The CARE Project Leader position also provides input to other activities related to education and outreach primarily facilitated by other Fisheries staff.

- **Provide CARE and fisheries related displays at fairs, trade shows, and outdoor enthusiast events**

The CARE educational trailer was on display at five large public fishing events and the Northeast Fishing and Hunting Show.

- **Utilize *CT FISH AND WILDLIFE* social media Facebook page to educate about CARE and fisheries related topics**

A minimum of two educational posts were published each week with content specific to increasing awareness of fishing and CARE fishing programs and activities. Over 18,000 of the [CTFishandWildlife](#) Facebook fans viewed the six Facebook live stream episodes conducted during this reporting period.

- **Provide an article about CARE or fishing related topics in each edition of *Connecticut Wildlife Magazine* (6 per year).**

Each bi-monthly edition contained an article.

- **Facilitate maintenance and development of FD web pages to inform the public about CARE classes, CARE events, and other fish and fisheries related content**

Pages were updated as necessary. The CARE schedule of classes was updated to focus on classes open to the public (removed summer fishing and Forster Pond classes) to reduce confusion.

- **Oversight of weekly fishing reports, press releases, and other educational materials**

Thirty weekly fishing reports, 7 press releases, and various brochures and pamphlets were produced.

- **Liaison with DEEP Office of Communication**

Conducted a minimum of five on air interviews with radio and television promoting CARE programs and events and fishing in general.

- **Collaborate with fisheries management job leaders to develop new and remodel existing strategies so to better serve the majority of the citizens of Connecticut, including;**

- **Increase awareness and utilization of traditional managed fisheries by CARE**
 - **Trout**
 - **Bass**
 - **Northern Pike**
 - **Walleye**
 - **Channel Catfish**

Utilized Facebook Live stream session(s) to promote the opportunity to fish for these species.

- **Complement the CARE program by creating new mechanisms to recruit, retain, and recapture anglers including;**

- **[Youth Fishing Passport](#)**
 - 1,215 registered with 368 of these being renewals.

- **Free Family Fishing Day**
 - Held on May 12, 2018 (Mother's Day Weekend) at Wharton Brook State Park in conjunction with the [No Child Left Inside Program](#) and the [Great Park Pursuit](#). Estimated attendance of 750 people.
- **Free Fishing License Days (two dates)**
 - The first date was Father's Day, June 17, 2018. 235 people obtained a free 1-day license.
 - The second date was August 11, 2018. Held in conjunction with the annual CARE saltwater fishing day, Fort Trumbull State Park, New London (350 estimated participants). 280 people obtained a free 1-day license.
- **Trout stocking programs for youth**
 - Coordinated trout stocking for kids activity at Free Family Fishing Day, May 12th.
 - Facilitated a pre-opening day trout stocking media event with students from the City of Hartford, in Keney Park Pond, a [community fishing water](#).

Appendix B.

