



Connecticut Envirothon

Annual Report

2020



Mission:

The mission of the Envirothon is to promote environmental awareness, knowledge, and active personal stewardship among high school students through educational workshops and team competition. The Connecticut Envirothon program began in 1992 as part of the North American Envirothon program. The 2019-2020 period marked the 29th year of offering the program to Connecticut high school students attending public, private, agricultural/technical and home school programs.



Taking the Aquatics exam.

Steering Committee:

The Connecticut Envirothon Program is guided by a volunteer steering committee.

Called the CT Envirothon Steering Committee, it consists of natural

resource professionals from various federal, state and local agencies, private environmental groups, and active and retired educators. There are monthly committee meetings and some of these meetings are held via conference calls in an effort to reduce greenhouse gas emissions released due to members' travel to meeting locations.

In addition to the main Steering Committee, there is an advisory committee that provides support and guidance to the program primarily through correspondence, financial support, and assistance at the workshops and the final May event. The advisory group has also taken on new tasks at the request of the Steering Committee, such as standardizing fundraising materials.

Program Workshops

Station teams are formed from the members of the Steering Committee for each of the Envirothon workshops: Soils, Forestry, Aquatics, Wildlife, and a rotating Current Issue (Water Resource Management, Local Sources, Local Solutions in 2019-2020). These station experts plan the curriculum and training workshops for each of the main subject areas. The station teams also prepare and administer the station exams during the field day competition in May.

A major reason for the success of the Connecticut Envirothon Program is because of the time and dedicated efforts of the following members of the Connecticut Envirothon Steering Committee (2019-2020):

Jeff Folger, Chair
Jean Laughman, Vice Chair
Pam Huntley, Treasurer
Karen Nelson, Secretary
Barbara Kelly, Program Coordinator
Candace Bartholomew
Greg Watkins-Colwell

Scot Frost
Ann Hadley
Fred Johnson
Lisa Krall
Jean Laughman
Deb Surabian
Peter Picone
Kelsey Sudol
Jean Pillo
Ed Smith
Laura Rogers-Castro
Denise Savageau
Joanna Shapiro
Sarah Smith
Charlotte Pyle
Cynthia Rabinowicz
Lynn Kochiss
Joan Nichols
Eric Hansen
Paul Benjuna
Mindy Gosselin
Tony Mitchell
Jane Seymour

North Central CT Conservation District
GEI Consultants
USDA Forest Service (Retired)
Northwest CT Conservation District
North Central CT Conservation District
UConn Cooperative Extension Service
Yale University - Peabody Museum of
Natural History
HRP Associates
Manchester Community College
GEI Consultants
Retired USDA NRCS
Envirothon Advisor/ Educator, UConn
USDA NRCS
CT DEEP
Northwest CT Conservation District
Eastern CT Conservation District
Educator, Two Rivers Magnet School
CT DEEP
CT River Coastal Conservation District
North Central CT Conservation District
Envirothon Advisor/Retired Educator
Retired USDA-NRCS
Northwest CT Conservation District
Educator
Private Forester
Private Forester
CT DEEP
North Central Conservation District
Rivers Alliance of Connecticut
CT DEEP



A team presents its solution to the Current Issue scenario "Make Mr. Smith's Farm Sustainable and Profitable" to a panel of judges.

Registration:

Registration announcements are sent to all Connecticut schools at the end of August. Schools are encouraged to submit the registration form and entry fee of \$75.00. There are need-based scholarships available for registration.

For the 2019-2020 program year, 31 schools representing 37 teams registered to receive study materials, participate in the workshops and attend the field event (See Table 1). This list of schools included several new school teams that participated at various levels throughout the academic year.

Academy of Aerospace and Engineering (CREC)	Lyman Hall HS
Academy of the Holy Family	Marvelwood School
Bacon Academy	New Fairfield HS
Bolton HS	Nonnewaug HS/ Woodbury FFA
Coginchaug Regional HS	Northwestern Regional HS #7
Common Ground HS	Old Saybrook HS
Connecticut River Academy	Parish Hill HS
Crosby HS	RHAM HS
East Lyme HS	Robert E. Fitch HS
Fairchild Wheeler Magnet HS	Rockville HS
Farmington HS	Shepaug Valley School—Ag
Glastonbury HS	Sound School
Haddam Killingworth HS	South Windsor HS
Housatonic Valley Regional HS	Stafford HS
Lyman Hall HS Ag Science	Wamogo HS and Agriscience
	Woodstock Academy
	Xavier HS

Table 1. Registered schools for the 2019-2020 CT Envirothon.

Study Materials:

All essential curriculum materials are posted on the CT Envirothon website www.ctenvirothon.org, with each station team maintaining and updating a materials list through the webmaster. Materials provided from the stations range from journal articles to fact sheets, from web-links to PowerPoint files, examples of previous exam questions, and other study guides. Envirothon programs from other states have linked their station pages to the Connecticut webpage resources to assist their own teams in preparation. This fact alone is testament to the strength of the materials and training provided by the CT Envirothon Steering Committee members.

Workshops:

The 2019-2020 program included three Saturday workshops covering the four subject areas. These training workshops give the participants insights to current conservation challenges in the subject areas. The workshops provide great opportunities for Envirothon students to interact with environmental/natural resource professionals and learn not only the facts but discuss career and college opportunities. An advisor orientation was also held during the academic year to supplement the study materials provided online. Due to the Covid19 pandemic, the Wildlife workshop was cancelled.

Soils and Forestry Workshop - October 26, 2019, Tolland County Agricultural Center, Vernon, CT.

The Soils and Forestry Teams joined for a traditional in-person workshop to open this year's CT Envirothon program at the Tolland Agricultural Center. Attending were 59 students, 23 advisors, 16 volunteers and 16 schools.



The workshop started with a presentation related to this year's Current Issue topic, *Water Resources Management in Connecticut, Local, Regional, State Control and Balanced Decision Making* by Tony Mitchell, Rivers Alliance of Connecticut.

The Soils Workshop featured hands-on stations including a soil pit where students learned about soil formation and soil properties such as color and horizonation, an indoor module on topographic map reading and soil survey, a mini rainfall simulator demo, and soil texture-by-feel lesson. Students also learned how invasive worms can affect soil ecosystems.



Volunteers at the workshop included representatives from USDA Natural Resources Conservation Service, the University of Connecticut, CT Envirothon Steering Committee, and the state's Conservation Districts.



Forestry Workshop - October 26, 2019, Tolland County Agricultural Center, Vernon, CT.

Three Forestry Rotations and 3 Soils Rotations followed the Current Issue presentation.

Forestry Rotations included:

1) **Tree Measurement** – Team members learned how to use a DBH tape, and a Biltmore (tree scale) stick for measuring tree diameter and merchantable height, and estimating board-foot volume. This section was led by Foresters Joan Nichols and Jim Parda.



2) **Tree ID** – Students practiced identifying common tree and shrub species in Connecticut. The rotation was led by Ed Smith, Two Rivers Magnet Middle School educator.

3) **Tree Physiology** – Team members identified “What Makes a Tree a Tree,” and tree growth characteristics adapted to soil types, water availability, and the needs of a tree, led by Goodwin Conservation Center Master Naturalist Lynn Kochiss.



Aquatics Workshop - January 18, 2020 Connecticut River Academy, East Hartford.

Seventy four students and 15 advisors were welcomed to the event at the beautiful Connecticut River Academy facilities by Aquatics team leader Kelsey Sudol. Over 38 volunteers, including presenters and co-presenters, representing a range of state and federal government agencies, academic institutions, and private organizations worked together to make the training a success.

The Aquatics Workshop held a total of 18 training sessions, with nine concurrent workshops over two session periods. Presenters represented the CT DEEP, Yale University's Peabody Museum of Natural History, the Pomperaug River Watershed Coalition, the Connecticut Agricultural Experiment Station, Connecticut River Conservancy, and the University of Connecticut. They instructed and challenged students in subject areas such as large-scale watershed stormwater sampling, watershed resource management and dynamics, identification of fish, amphibians, invasive aquatic plants, freshwater mussels, and freshwater macroinvertebrates.



Wildlife Workshop – Sessions Woods Wildlife Management Center, Burlington.

The Wildlife Workshop was cancelled due to the Covid-19 pandemic. The workshops are always much anticipated and heavily attended.

Pete Picone, Station Leader for the Wildlife Section, spearheaded a new project sponsored by the CT Envirothon. Trail cameras were distributed to six participating schools this year. The schools will post the cameras on school grounds to capture the activities of wildlife living and travelling through their campus. Selected pictures taken from each participating school will be submitted to the Steering Committee for display at a future Envirothon event. Participants at the event will vote on the best picture submitted.



Teams gather at Sessions Woods for a Wildlife workshop

Virtual Field Event: June 1-6, 2020

Testing:

Due to the Covid-19 pandemic, the station tests were revised by the Station Leaders to be taken completely online.

Since all of the schools ceased face-to-face operations in March, the respective teams utilized several virtual platforms to access the tests. Team members collaborated with each other to provide the answers. The testing subcommittee of the CT Envirothon Steering Committee utilized Google Classroom to make the tests available to student teams. Each of the five station tests were “available” for a 24-hour period on a specific day during the week. The student teams were free to take the test anytime during that period, but could only spend one hour on the test. The teams could use platforms such as ZOOM to gather together, with one team member responsible for filling out the test and submitting it for grading. The tests included written questions supplemented with visual images or event videos to enhance the experience.

Oral Scenario and Presentations: All of the student teams were presented with a scenario in February to “*Develop a Management Plan for the Natchaug River Watershed.*” The teams were tasked with developing their presentation in PowerPoint and to submit the finished presentation via email to be judged. The teams were given three weeks to develop the presentation and given specific parameters. No more than 10 “slides” could be used to convey their message. As with the testing, the students had to “meet” and view virtual platforms such as ZOOM to craft their presentation. Each team’s presentation score, based on a rubric, was added to each of their other specific station test scores.

Twelve student teams participated in Connecticut Envirothon’s first ever Virtual Testing Event.

First place was awarded to Northwestern Regional HS Team #2, 2nd place to Northwestern Regional HS Team #1, and 3rd place to Housatonic Valley HS.

Cash prizes were awarded to all of the participating teams. Engraved plaques were awarded to teams that placed first through third, as well as teams that achieved high scores on each topic test.

THANK YOU!

We thank the following organizations and individuals who contributed cash, in-kind, or material donations to the 2019-2020 Connecticut Envirothon program:

AGENCY SPONSORS

Connecticut Council on Soil and Water Conservation
Connecticut Association of Soil & Water Conservation Districts
Connecticut Department of Energy & Environmental Protection
USDA Natural Resources Conservation Service
Society of Soil Scientists of Southern New England
UConn Cooperative Extension System
USDA Forest Service
Connecticut's Five Conservation Districts
Yale University - Peabody Museum of Natural History
Friends of Sessions Woods

CORPORATE SPONSORS

Pratt and Whitney
GEI Consultants
Collins Aerospace Systems
GEI Employees, Glastonbury Offices
Tolland County Agricultural Center

Individual Sponsors

GEI Glastonbury Staff

Financial Report:

The Connecticut Envirothon program was financed through donations from private corporations and public organizations, including a GoFundMe account. Donations were used to purchase materials for study notebooks and workshops, T-shirts for the field day, food and refreshments for the field day and workshops, membership and registration to the National Envirothon, and travel by the state representative to the national competition and the annual winter meeting.

A proposed budget for 2018-19 was developed and approved by the Steering Committee at the beginning of the academic year. Both the proposed budget and actual expenditures are included on the following page.



CONNECTICUT ENVIROTHON
FISCAL YEAR SEPT 2019 TO AUG 2020

REPORT AS OF: 26-Aug-2020

	BEGINNING	\$40,584.51	1-Sep-2019
	ENDING	\$58,741.75	26-Aug-2020
	<u>PROJECTED 20</u>	<u>YEAR TO DATE</u>	<u>CURRENT</u>
RECEIPTS			
Interest	\$20.00	\$22.75	\$3.37
Team Registration \$75 per team	\$3,000.00	\$2,400.00	
Misc. Payments	\$0.00	\$0.00	
Council on Soil and Water Conservation	\$20,000.00	\$20,000.00	
Sponsors	\$9,110.00	\$5,850.00	
TOTALS	\$32,130.00	\$28,272.75	\$3.37
	<u>BUDGETED 20</u>	<u>YEAR TO DATE</u>	<u>CURRENT</u>
EXPENSES			
Supplies/Educational Materials	\$1,000.00	\$36.02	
General Supplies (binders, paper, etc)	\$250.00	\$36.02	
Soils	\$150.00	\$0.00	
Aquatics	\$150.00	\$0.00	
Forestry	\$150.00	\$0.00	
Wildlife	\$150.00	\$0.00	
Current Issue	\$150.00	\$0.00	
Teacher Orientation	\$500.00	\$0.00	
T Shirts & other merchandizing	\$3,500.00	\$2,585.00	
Outreach Materials (Brochure, Social Media)	\$500.00	\$511.59	
Postage	\$200.00	\$168.00	
Awards	\$1,000.00	\$476.55	\$423.56
National Dues	\$350.00	\$350.00	
National Meeting Travel Expenses	\$2,400.00	\$752.41	
Registration for National Event	\$1,800.00	\$0.00	
Team Travel to National	\$3,500.00	\$2,100.00	
Contingency	\$1,000.00	\$0.00	
Event	\$7,400.00	\$0.00	
Lunch	\$5,100.00	\$0.00	
Breakfast, snacks	\$450.00	\$0.00	
Tables, chairs, tent	\$1,550.00	\$0.00	
Site rental	\$250.00	\$0.00	
Miscellaneous	\$50.00	\$0.00	
Workshops	\$1,375.00	\$767.55	
Soils	\$240.00	\$564.00	
Aquatics	\$240.00	\$139.54	
Forestry	\$240.00	\$64.01	
Wildlife	\$240.00	\$0.00	
Current Issue	\$240.00	\$0.00	
Map Reading	\$0.00	\$0.00	
Judge's Training	\$175.00	\$0.00	
Program Assistant	\$6,000.00	\$1,686.14	
Program Director	\$0.00	\$0.00	
Web Site/Internet Service	\$905.00	\$682.25	
Mileage	\$200.00	\$0.00	
Instate Meetings	\$500.00	\$0.00	
TOTALS	\$32,130.00	\$10,115.51	\$423.56
PayPal	\$369.96		

Sponsors

NextEra Energy Foundation, Inc.	\$2,500.00
HRP Associates, Inc.	\$1,000.00
Society of Soil Scientists of Southern New England	\$500.00
Collins Aerospace	\$1,500.00
GEI (party cookie jar)	\$350.00

Neil Picone Memorial	\$2,300.00
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