

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 2017-2018 period marked the 27th year of offering the program to Connecticut high school students attending public, private, agricultural/technical and home school programs.

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.



A team proudly shows their current issue

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 (Range and Grassland Management Stewardship in 2017-18). 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 (2017-2018):

Jeff Folger, Chair North Central CT Conservation District

Kristen Ponak, Vice Chair GEI Consultants

Pam Huntley, Treasurer USDA Forest Service (Retired)

Peter Picone, Secretary CT DEEP

Barbara Kelly, Program Coordinator

North Central CT Conservation District

Candace Bartholomew UCONN Cooperative Extension Service

Kim Bradley Private Consultant

Greg Watkins-Colwell Yale University - Peabody Museum of Natural History

Scot Frost Collins Aerospace Division
Ann Hadley Manchester Community College

Fred Johnson GEI Consultants
Lisa Krall Retired USDA NRCS

Jean Laughman Envirothon Advisor/ Educator, UConn

Deb Surabian USDA NRCS

Karen Nelson
Northwest CT Conservation District
Kelsey Sudol
Northwest CT Conservation District
Jean Pillo
Eastern CT Conservation District
Ed Smith
Edwarder Two Pivers Magnet School

Ed Smith Educator, Two Rivers Magnet School

CT DEEP

Denise Savageau Southwest CT Conservation District
Joanna Shapiro North Central CT Conservation District
Sarah Smith Envirothon Advisor/Retired Educator

Charlotte Pyle Retired USDA-NRCS

Cynthia Rabinowicz Northwest CT Conservation District

Lynn Kochiss Educator

Laura Rogers-Castro

Joan Nichols Private Forester
Eric Hansen Private Forester

Paul Bunjunas CT DEEP



The team prepares for their oral presentation

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 2017-2018 program year, 32 schools representing 34 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

Academy of the Holy Family

Academy of Science & Innovation

Avon HS

Bacon Academy

Bolton HS

Coginchaug Regional HS

Common Ground HS

Connecticut River Academy

Coventry MS

East Catholic HS

Ellington HS

Fairchild Wheeler Interdistrict Magnet HS

Farmington HS Glastonbury HS

Housatonic Valley Regional HS

Killingly Agricultural Education

Lyman Hall HS & Agri Science

Northwest Regional HS #7

Old Saybrook HS

RHAM HS

Robert E. Fitch HS

Rockville HS

Science & Techology HS

South Windsor HS

Sports & Medical Sciences Academy

Suffield Reg. HS & Agriscience

Thomaston HS

Wamogo HS

Waterford HS

Woodstock HS

Xavier HS

Table 1. Registered schools for the 2017-2018 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 2017-2018 program included four Saturday workshops covering the five subject areas. These training workshops give the participants insights to current conservation challenges in the five 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.

Forestry and Current Issue Workshop - October 21, 2017, Tolland County Agricultural Center, Vernon.

Due to transitions and the re-building of the Forestry Team during the 2017-2018 Envirothon year, forestry topics were presented at additional workshops.

Seventy-nine students and 19 advisors attended the Saturday, October 21, 2017, workshop, which combined background about the national Current Issue topic (Range and Grassland Management Stewardship) with Forestry topics. Michael Margo, ecological site specialist with USDA NRCS, began the workshop with a discussion of the challenges of Western Rangelands. This was followed by concurrent sessions. Jane Seymour, DEEP wildlife biologist, spoke about local habitats and grasslands. Dr. Jack Clausen, University of Connecticut Department of Natural Resources, discussed farm management practices. Dr. Robert Fahey, University of Connecticut Department of Forest Ecology and Management, discussed forest ecology in Connecticut. Ed Smith,



Two Rivers Magnet Middle School educator, shared tree bark, logs and fruit samples from his extensive collection, and guided outdoor tree ID sessions.

Additional forestry topics were introduced during the concurrent sessions at the March 17, 2018, Wildlife Workshop at Sessions Woods WMA, Burlington and at the Soils Workshop, April 21, 2018, at the Tolland Agricultural Center.

Aquatics Workshop – February 10, 2018 Connecticut River Academy, East Hartford.

Due to weather conditions, the Aquatics workshop was rescheduled from January 13, 2018 to the February date. Forty seven students and 15 advisors were welcomed by Aquatics team leader Kimberly Bradley. 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 16 training sessions, with eight concurrent workshops over two session periods. Representatives from CT DEEP, Yale University's Peabody Museum of Natural History, Connecticut Agricultural Experiment Station, Connecticut Sea Grant, the Town of Greenwich instructed and challenged students in subject areas including non-point source pollution, watershed dynamics, identification of fish, amphibians, invasive aquatic plants, freshwater mussels, and freshwater macroinvertebrates.



Teams examine aquatic samples

Wildlife and Forestry Workshop: March 17, 2018 Sessions Woods Wildlife Management Area, Burlington

Fifty-seven students and 11 advisors attended the combined wildlife and forestry workshop at Sessions Woods. Peter Picone, DEEP wildlife biologist introduced the audience to a varied program of nine topics ranging from the behavioral characteristics and habitats of the bobolink to a mock timber sale. Participants ended the concurrent sessions with a wildlife quiz that challenged them to identify a variety of wildlife specimens displayed throughout the building.

Ken Elkins, CT Audubon Center education program manager, presented "The Bobolink; Its Behavioral Characteristics and Its Habitat," to heighten awareness of the Connecticut connection to the current national issue topic "Rangeland Habitat Management." His introduction was complemented by a discussion of "Enhancing Grassland Habitat" by Peter Picone. Paul Benjunas, DEEP resource assistant, helped participants "Identify CT Furbearer Pelts." Christine Peyreigne, falconer and wildlife rehabilitator, discussed "Cavity Nesters: Birds of Prey and Falconry Basics" and characteristics of the Bald Eagle and Red Tailed Hawk. Other topics included "Monarch Rescue" by Master Wildlife Conservationist Eric Rahn, and songbird capture and banding techniques by Audubon Connecticut representatives. Forestry topics included "Forest Products: From the Woods to Finished Product" and a "Mock Timber Sale" presented by Certified Forester Joan Nichols, while "Forest Pests and Diseases" were discussed by Edmund Smith, CREC Two Rivers Magnet Middle School educator.



Teams learn about Connecticut wildlife

Soils and Forestry Workshop: April 21, 2018 Tolland County Agriculture Center, Vernon.

The theme of "Soils Uncovered: From the Surface Down" guided the students and team advisors who met at the Tolland County Agricultural Center to learn how soils are an important component of conservation. Michael Margo, ecological site specialist with the USDA NRCS, related the national current issue to local conditions by discussing "Soil and and Vegetation of Eastern Pastures and Western Rangelands." Station leader and CT/RI State Soil Scientist Deb Surabian introduced the participants to the Soils and Web Soil Survey. Dawn Pettinelli, UConn extension educator, provided hands-on experience in soil properties and characteristics.



Teams explored Soil Station rotations by brushing up on basic soil skills, examining a soil pit, honing map reading skills and learning about current studies involving earthworms. During concurrent forestry sessions at the soils workshop Joan Nichols, a certified forester, presented two topics: "Forester Tools and Equipment" and "Timber Management," while CREC educator Ed Smith, led a hands-on outdoor session: "Tree Measurement with a Biltmore Stick and Tree Scale Stick."

Field Event: Thursday, May 24, 2018 Topsmead State Forest, Litchfield.

The full-day field event was held at the Topsmead State Forest in Litchfield. Working with Envirothon volunteers and station leaders, the five station exam areas were spaced out around the property. Twenty-seven teams brought 180 students to participate in the competition. There were four "wild card teams" comprised of alternates from participating schools, which allowed more students to be exposed to the process of the event and show their knowledge.

Advisors of the participating teams attended a three hour workshop that introduced the 2018 topic proposed by the national NCF Envirothon program: Western Rangeland Management: Balancing Diverse Views. Nancy Marek, a member of the University of Connecticut Department of Natural Resources and the Environment, presented a view of "Emerging Technologies: Using Drones to Map Woodland Invaders." She also brought a variety of drones for advisors to examine. Brett Lehrner provided an update on the Permaculture Project, and Kip Kolesinskas, University of Connecticut Extension land use and conservation specialist and a Solid Ground Farmer Training Program expert, discussed "Farming Forward – Challenges & Opportunities in a Changing Climate." Jack Hine, park manager at Topsmead State Forest, led a tour of the forest for interested advisors.

After arriving at the site by 7:30 am, student teams completed the registration process, received their t-shirts, information packets and oral presentation numbers. Everyone then assembled for the opening ceremonies and distribution into exam groups. During

the competition, teams rotated through four stations – forestry, soils, aquatics and wildlife – where they completed a written exam with hands-on components in a collaborative manner. A fifth station required an oral presentation of the team's solution to the 2017-18 current issue scenario: *Develop a Management Plan for the Bobolink.*" The presentations were made before



a panel of judges that used a specific rubric to determine the team's successful solution to the current issue scenario. Each team's final scores consisted of the total from the four stations and the oral presentation.

After the competition, all participants and volunteers enjoyed a BBQ luncheon provided by The Country Butcher. Teams relaxed on the grass and at tables while enjoying the sunny weather. This allowed time for decompressing after a mentally taxing morning. A raffle was conducted for the students and advisors while the exam scores were being tabulated for final team placements.

Student teams arrived in buses and vans and were guided to the registration table to get their t-shirts, information packets and oral presentation numbers. Everyone assembled at the pavilion for the opening ceremonies and distribution into exam groups.

Results of the 2018 Field Day Competition included First place to the Academy of Aerospace and Engineering, Windsor 2nd place to Housatonic Valley High School Team 2, Falls Village, and



National Event and National Steering Committee:

The student team from the Academy of Aerospace and

3rd place the Housatonic Valley High School Team 1.

Engineering in Windsor, CT, attended the North American Envirothon in Pocatello Idaho, from July 22-27, 2018, as

Connecticut's representative. They, along with students from 42 states, 6 Canadian provinces and 2 mainland Chinese teams competed in the 31st

International Event. They were accompanied by their Teacher/Advisor, Meghan Kincaid, and Chaperone, Robert Branscombe. The Connecticut team ably represented our State. We thank them and their teacher/adviser for their dedication and effort.

The Connecticut Envirothon continues to support the North American Envirothon program. The North American Envirothon merged in 2014 with the National Conservation Foundation, a non-profit, fundraising entity of the National Association of Conservation Districts, to facilitate fund raising efforts to continue the program. Connecticut Steering Committee member Jeff Folger has been appointed to the National Operating Committee which is charged with developing policies and procedures for the national organization, and assisting in the operation of the summer competition. Jeff attended the winter meeting in Nashville, and the summer national event in Idaho, as well as assisting the Academy team with registration and travel arrangements.



North American Envirothon participants in Soda Springs, Idaho – July 2018

THANK YOU!

We thank the following organizations and individuals who contributed cash, in-kind, or material donations to the 2017-2018 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

GEI Consultants
The Country Butcher
UTC Aerospace Systems
Connecticut Water Co.
GEI Employees, Glastonbury Offices
Tolland County Agricultural Center

Individual SponsorsGEI 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; travel to the national competition and the annual national meeting.

A proposed budget for 2017-18 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 2016 TO AUG 2017

	BEGINNING ENDING	\$31,361.71 \$36,755.02
	PROJECTED 17	YEAR TO DATE
RECEIPTS	#20.00	¢10 ==
Interest	\$20.00 \$3,000.00	\$18.57
Team Registration \$75 per team	\$3,000.00	\$3,150.00 \$0.00
Misc. Payments Council on Soil and Water Conservation	\$5,000.00	\$5,000.00
Permaculture Grant	\$3,000.00	\$3,366.30
Sponsors	\$21,060.00	\$13,503.81
TOTAL		\$25,038.68
TOTAL		
EXPENSES	BUDGETED 17	YEAR TO DATE
EXPENSES Supplies/Educational Materials	:\$1,000.00	1000 AT
General Supplies (binders, paper, etc)	\$250.00	\$272:27 \$272.27
Soils	\$250.00 \$150.00	\$0.00
Aquatics	\$150.00	\$0.00
Forestry	\$150.00 \$150.00	\$0.00
Wildlife	\$150.00 \$150.00	\$0.00
Current Issue	\$150.00 \$150.00	\$0.00
T Shirts & other merchandizing	\$3,500.00	\$2,381.00
Outreach Materials (Brochure, etc.)	\$500.00	\$0.00
Storage Space	\$0.00	\$0.00
Postage	\$200.00	\$0.00
Petty Cash	\$0.00	\$0.00
Awards	\$1,000.00	\$600.60
National Dues	\$350.00	\$350.00
National Meeting Travel Expenses	\$1,800.00	\$1,769.49
Registration for National Event	\$1,800.00	\$1,800.00
Team Travel to National	\$3,100.00	\$1,456.02
Event	\$6,350.00	\$5,427.00
Lunch	\$5,100.00	\$4,975.00
Breakfast, snacks	\$450.00	\$452.00
Tables, chairs, tent	\$250.00	\$0.00
Sound system	\$50.00	\$0.00
Toilets	\$200.00	\$0.00
Site rental	\$250.00	\$0.00
Miscellaneous	\$50.00	\$0.00
Workshops	\$1,875.00	\$1,042.73
Soils	\$240.00	\$111.40
Aquatics	\$240.00	\$166.29
Forestry	\$240.00	\$174.13
Wildlife	\$240.00	\$287.79
Current Issue	\$240.00	\$0.00
Map Reading	\$0.00	\$0.00
Teacher Orientation	\$500.00	\$303.12
Judge's Training	\$175.00	\$0.00
Program Assistant	\$6,000.00	\$3,368.55
Program Director	\$0.00	\$0.00
Web Site/Internet Service	\$905.00	\$657.01
NCF Diversity Grant	\$0.00	\$520.70
-	\$200.00	\$0.00
Mileage	φ=00.00	
Mileage Instate Meetings	\$500.00	\$0.00