



Connecticut

Envirothon

Annual Report

2015



Connecticut Envirothon 2015 Annual Report



The 24th Connecticut Natural Challenge!



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. As part of the North American Envirothon program, the Connecticut Envirothon program began in 1992. The 2014-2015 year marked the 24th year of offering the program to Connecticut high school students.

**Steering Committee:**

The Connecticut Envirothon Program is guided by a volunteer Steering Committee. This group consists of natural resource professionals from various federal, state and local agencies, and private environmental groups. There are monthly committee meetings and some of these meetings are held via conference call in an effort to reduce greenhouse gas emissions released due to member travel to meeting locations.

Teams are formed amongst the members of the Steering Committee for each of the Envirothon stations, which are: Soils, Forestry, Aquatics, Wildlife, and a rotating Current Issue (Urban Forestry). 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 on the day of the competition in May.

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 working at the competitive event and workshops. The advisory group can also take on new tasks at the request of the steering committee group. Members of the advisory group have been working on standardizing fundraising materials and also offer assistance to station teams and volunteer at the competitive event.

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 (2014-2015):

Lisa Krall	Chair	USDA NRCS
Kristen Ponak,	Vice Chair	GEI Consultants
Pam Huntley,	Treasurer	USDA Forest Service (Retired)
Karen Nelson,	Secretary	Northwest CT Cons. District
Kelly Starr		CT River Coastal Cons. District
Barbara Kelly,	Program Coord	North Central Cons District
Peter Picone,		CT DEEP
Kim Bradley		GEI Consultants
Chris Sullivan,		CT DEEP
Candace Bartholomew		UConn Coop Extension
Ann Gygax		Envirothon Advisor/Retired Educator
Jeff Folger		North Central Cons District
Scot Frost		Hamilton Sunstrand
Ann Hadley		Middlesex Community College
Sean Hayden		Northwest CT Cons District
Fred Johnson		GEI Consultants
Jean Laughman		Envirothon Advisor/Retired Educator
Jean Pillo		Eastern CT Cons. District
Claire Foster		CT DEEP
Jeremy Clark		Consulting Forester
Adam Maikshilo		USDA NRCS
Nancy Marek		UConn Cooperative Extension Forester
Laura Rogers-Castro		CT DEEP
Joanna Shapiro		North Central Cons District
Denise Savageau		Southwest Cons. District
Sarah Smith		Envirothon Advisor/Retired Educator
Greg Watkins-Colwell		Yale Peabody Museum
Carol Youell		Metropolitan District Commission Forester

Registration:

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

For the 2015 program year 43 schools registered (Table 1) to receive study materials, participate in the workshops and attend the field event. This list of schools included several new school registrations that participated at various levels throughout the academic year.

Table 1. Registered schools for the 2014-2015 CT Envirothon.

Avon High School	Manchester High School
Bacon Academy	Marvelwood School Team 1 & 2
Bolton High School	Nonnewaug High School
Choate Rosemary Hall	Northwestern Regional High School
Coginchaug Regional High School	Norwich Free Academy
Common Ground High School Team 1 & 2	Old Saybrook High School
Connecticut River Academy	RHAM High School Team 1 & 2
Crosby High School Team 1 & 2	Rockville High School
East Catholic High School	Science & Technology High School Team 1 & 2
Ellington High School	Simsbury High School
Fairchild Wheeler Inter District Magnet Campus	The Sound School
Glastonbury High School	South Windsor High School
Harvard H. Ellis Technical High School	Sport & Medical Sciences Academy
Housatonic Valley High School	Two Rivers Magnet High School
Housatonic Valley Agriscience	Wamogo High School
Howell Cheney Technical High School	Wamogo High School Ag/FFA
James Hillhouse High School	Waterford High School
Killingly Agricultural Education Center	Woodstock Academy
Litchfield High School	Xavier High School



Study Materials:

All essential curriculum materials have been posted on the CT Envirothon website www.ctenvirothon.org , with each station team maintaining and updating their materials list through the webmaster. Materials provided from the stations range from journal articles to fact sheets, from weblinks to powerpoint files, and of course 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 2015 program included educational workshops for students and teachers of the Connecticut Envirothon throughout the school year. Four Saturday workshops covering the five subject areas and a teacher orientation were held during the academic year to supplement the study materials provided online. These training workshops give the participants insights to current conservation challenges in the five subject areas. The workshops provide great opportunities for the high school students to interact with the environmental/natural resource professionals and learn not only the facts but discuss career and college opportunities.

Teacher Workshop- September 23, 2014 (Tuesday)- Advisor Orientation from 4:00 PM to 6:00 PM at the Metropolitan District Commission Training Facility in Hartford, CT

Advisor Orientation was held from 4:00 to 6:00 pm with dinner. Chairperson Lisa Krall introduced the CT Envirothon Steering Committee that was present and station leaders. This session was an evening workshop that presented a program overview for each of the participating school advisors. Each of the station teams gave presentation of their materials and highlighted any new information distributed for the 2014-2015 academic year. The upcoming training workshop dates and locations were also highlighted for attendees. Teachers enjoyed a buffet dinner and new advisors connected with experienced advisors for assistance and pointers on running a successful Envirothon team.



Soils Workshop - September 27, 2014 (Saturday)- Soils Workshop - Tolland County Agricultural Center in Vernon, CT. 127 students and 31 teachers and parents representing 25 Connecticut high schools attended. Lectures on basic soil properties, sustainable agriculture and soil health preceded break-out sessions where students tried out identifying texture and color; learned about map reading, aerial photography, and soil web applications; participated in a mock soils exam at the soil pit; watched a demonstration of the rainfall simulator; and learned about micro-green production at the center by a program that focuses on training adults with developmental disabilities. Helpers at the workshop included NRCS employees, University faculty, retired Envirothon coaches, and CT NRCS Earth Team Volunteers. Even with the large numbers, the students' dedication to learning insured that all came away with new knowledge and hands-on experience.

Forestry and Current Issue Workshop - October 18, 2014 at Sessions Woods Wildlife Management Center, Burlington, CT. This year the Forestry and Current Issue workshop were combined for a full day of learning on many topics pertaining to both Forestry and Urban Forestry. Over 160 students, mentors and volunteers attended. The welcome and introductions were made by Claire Foster, from the Connecticut DEEP. The day began with a presentation on “What is a Tree?” given by Jeff Ward, Chief Scientist from the CT Agricultural Experiment Station. Next, Tom Worthley, UCONN Assistant Professor and Chris Donnelly, Urban Forestry Coordinator with the CT DEEP gave a presentation comparing Traditional and Urban Forestry.



Once the indoor presentations were completed the students moved outside. The field exercises focused on hands on instruction and practice with Pacing, Tree Measurements, Tree Identification and Forest Management, with an emphasis on urban forestry tree assessments. The following foresters, tree wardens, and forestry experts assisted with the field portion of the program: Joseph Barsky, Kirk Blanchard, Jeremy Clark, Chris Donnelly, Mike Gaines, Jim Govoni, John Hass, Andy Hubbard, Tony Mitchell, Dennis Panu, Scott Rogers, Annie Shutts, Jeff Ward, and Carol Youell.

After the morning field sessions, everyone enjoyed box lunches made possible by the generosity of the CT Tree Wardens’ Association before moving into the afternoon session. Charmaine Craig, the Director of Community Involvement with Knox, gave a presentation on the importance of community involvement in urban forestry. Her presentation was followed by two breakout sessions: the first on Tree Benefits and Products, led by Tom Worthley from UCONN and the second on Tree Health, Conditions, and Concerns, led by Chris Donnelly from CT DEEP. The day concluded with a presentation on Forest Management Plans given by Hannah Reichle, recent UCONN Natural Resources graduate and CT Envirothon alumna. At the end of the workshop foresters were available to answer additional questions and provide guidance for students and teachers who wanted to practice and improve their forestry skills.

Aquatics Workshop - January 17, 2015 at Connecticut River Academy in East Hartford. Twenty-seven high schools were in attendance, including 127 students and a total of over 160 participants counting instructors involved, based on sign in information. The combination of



support from Goodwin College and the Connecticut River Academy, including all of the volunteers from both groups, made for a highly successful day. For the first time, the Aquatics Workshop held a total of ten training sessions, with five concurrent workshops over two session periods. Representatives from UCONN, CTDEEP, Yale-Peabody, CAES, NOAA NMFS, The Maritime Aquarium, GEI Consultants, and Goodwin College instructed and challenged students in subject areas including non-point source pollution to wetlands, watershed dynamics, identification of fish,

amphibians, invertebrates, aquatic invasive plants, as well as introduced concepts in aquatic sampling techniques and forms of equipment. Evaluation forms the students and instructors were asked to fill out following the session and independent feedback demonstrated that all involved were very satisfied with the workshop.

Wildlife Workshop – March 7, 2015 at
Session Woods WMA, Burlington, CT

The wildlife training workshop had several concurrent activities for the student teams. Students had six wildlife-related talks to choose from and attend. Session topics included: “Connecticut’s Wildlife Challenges and Opportunities: Wildlife Habitat Quantity versus Quality” by Peter Picone (DEEP Wildlife Biologist); “Deer Ecology and Management in Connecticut” by Howard Kilpatrick (DEEP Wildlife Biologist); “Creating Rain Gardens With



Native Plants: Multiple Environmental Benefits” by Kyle Turoczi (Soil Scientist) and Lisa Turoczi (Landscape Architect); “Chimney Swifts in Connecticut; Can You Make A Difference” by Shannon Kearney-McGee (DEEP Avian Population Analyst); “Songbird Capture and Banding Techniques” by Laurie Fortin (DEEP Biologist); “Identifying Furbearer Skulls” by Edmund Smith (Educator at CREC Two Rivers Magnet School; “Identifying Furbearers” by Laura Rogers-Castro (DEEP Environmental Analyst/Natural Resource Educator); Following the workshop sessions, there was a quiz of exhibits that were spaced around the education center. After a 40 minute walkthrough, the group reassembled to go over the answers to the specimens included in the quiz.

There were 120 students/advisors in attendance. Friends of Sessions Woods, Incorporated sponsored (grant for \$250) morning refreshments which included juices, bagels, coffee, hot chocolate, and tea.

Field Event:

(May 21, 2015) The full-day field event was held at The Arboretum at Connecticut College in New London, CT. Working with property staff and station leaders the five station exam areas were spaced out around the Arboretum property. Thirty-seven schools assembled 52 teams and



over 250 students participated in the competition. There were nine “wild card teams” comprised of alternates from participating schools which allows more students to be exposed to the process of the event and show their knowledge. Advisors from the participating teams attended a three hour workshop about Invasive Species (the 2016 Current Issue). Donna Ellis, from the University of Connecticut (and co-chair of the Connecticut Invasive Plant Working Group) spoke and provided live specimens to ID. The Advisors then were given a tour of the Arboretum by Conn College Staff.

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

Each of the stations featured a written exam for the student teams to complete in a collaborative manner. Each station included some hands-on component to their exam questions, ranging from fish identification to measuring board feet of a tree; these tasks challenged the teams on many levels. After the competition, all participants and volunteers enjoyed a BBQ luncheon in at the picnic facilities. Teams relaxed on the grass and at tables while enjoying the weather. This allowed time for decompressing after a mentally taxing morning. A raffle was conducted comprised of several donated items for the students while the exam scores were being tabulated for final tallies.

Once team totals were finalized by the grading volunteers, the teams reassembled at the Amphitheater to await their scores and accompanying awards. First place was award to Cuginchaug Regional High School; 2nd Place: Housatonic Valley Agriscience and 3rd Place: Housatonic High School School.



National Event and National Steering Committee:

The student team from Coginchaug Regional High School in Durham, CT attended the North America Envirothon in Springfield Missouri in from July 27 to August 2, 2015. They, along with students from 45 States, 6 Canadian Provinces and 1 Territory competed in the 27th International Event. They were accompanied by their Teacher/Advisor, Susan Michael, and Chaperone, Kevin Charrette. The Connecticut team ably represented our State by placing 15th out of 52 competing teams. We thank them and their teacher for their dedication and effort.

The Connecticut Envirothon continues to support the North American Envirothon program. The North American Envirothon merged 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 as well as assisting in the operation of the summer competition. Jeff attended the winter meeting in New Orleans, LA, and the summer national event in Springfield, Missouri, as well as assisting the Coginchaug team with registration and travel arrangements.

Connecticut received a \$2000.00 Diversity Grant from the USDA Forest Service to assist under served schools to attend Connecticut Envirothon events.

Connecticut received a \$5000.00 Educational Grant from the USDA Natural Resources Conservation Service to assist in program operations.



THANK YOU!

We would like to thank the following organizations and individuals who contributed cash, in-kind, or material donations to the 2015 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 Peabody Museum of Natural History
Connecticut Chapter of the Society of American Foresters
Tree Warden's Association of Connecticut
Connecticut College Arboretum
Friends of Sessions Woods

CORPORATE SPONSORS

GEI Consultants
Metropolitan District Commission
The Country Butcher
UTC Aerospace Systems
Connecticut Water Co.
Environmental Professionals of Connecticut
Rockville Bank Foundation
Tolland County Agricultural Center
Hartford County Extension Council

Financial Report:

The Connecticut Envirothon program was financed through donations from private corporations and public organizations. 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 annual national meeting.

A proposed budget for 2015 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 pages.



CONNECTICUT ENVIROTHON
FISCAL YEAR SEPT 2014 TO AUG 2015

	BEGINNING	\$39,936.29
	ENDING	\$32,578.74
	PROJECTED 15	YEAR TO DATE
RECEIPTS		
Interest	\$50.00	\$17.43
Team Registration \$75 per team	\$3,000.00	\$2,900.00
Team Registration Late	\$0.00	\$0.00
Extra Team Materials	\$0.00	\$0.00
T-Shirt Sales	\$0.00	\$0.00
Misc. Payments	\$0.00	\$57.80
Council on Soil and Water Conservation	\$10,000.00	\$10,000.00
NRCS Education Grant	\$5,000.00	\$5,000.00
Sponsors	\$12,075.00	\$7,550.00
TOTALS	\$30,125.00	\$25,525.23
EXPENSES		
Supplies/Educational Materials	\$1,425.00	\$3,406.60
General Supplies (binders, paper, etc.)	\$600.00	\$69.79
Soils	\$165.00	\$0.00
Aquatics	\$165.00	\$0.00
Forestry	\$165.00	\$1,075.20
Wildlife	\$165.00	\$0.00
Current Issues	\$165.00	\$2,261.61
T Shirts & other merchandizing	\$4,100.00	\$4,084.00
Outreach Materials (Brochure, etc.)	\$500.00	\$0.00
Storage Space	\$0.00	\$0.00
Postage	\$400.00	\$189.00
Petty Cash	\$0.00	\$0.00
Awards	\$1,000.00	\$614.90
National Dues	\$300.00	\$300.00
National Meeting Travel Expenses	\$1,800.00	\$1,745.55
Registration for National Event	\$1,300.00	\$1,300.00
Team Travel to National	\$3,100.00	\$3,100.00
Event	\$6,120.00	\$5,442.61
Lunch	\$4,800.00	\$5,063.50
Breakfast, snacks	\$520.00	\$313.59
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	\$65.52
Workshops	\$1,875.00	\$2,426.18
Soils	\$240.00	\$143.83
Aquatics	\$240.00	\$93.43
Forestry	\$240.00	\$65.28
Wildlife	\$240.00	\$344.70
Current Issues	\$240.00	\$1,414.94
Map Reading	\$0.00	\$0.00
Teacher Orientation	\$500.00	\$364.00
Judge's Training	\$175.00	\$0.00
Program Assistant	\$4,600.00	\$9,204.18
Program Director	\$0.00	\$0.00
Web Site/Internet Service	\$905.00	\$675.00
Mileage	\$200.00	\$0.00
2015 Diversity Grant	\$2,000.00	\$394.76
Instate Meetings	\$500.00	\$0.00
TOTALS	\$30,125.00	\$32,882.78

Rockville Bank Foundation	\$1,000
Hartford County Extension Council	\$1,000
Ann Hadley	\$150
Tree Wardens Association of Connecticut	\$500
The Society of Soil Scientists of Southern New England	\$500
Friends of Sessions Woods	\$250
Connecticut Chapter of the Society of American Foresters	\$300
United Technologies Aerospace Systems - Hamilton Sundstrand	\$1,500
National Conservation Foundation, Inc. (Diversity Grant)	\$2,000
The Connecticut Water Company	\$350