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Pennsylvania Envirothon

2009

Annual Report

ACCEPT THE NATURAL CHALLENGE!

"Pennsylvania is the Founder of North America's largest high school environmental education competition, the Envirothon."

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Our Mission

The Pennsylvania Envirothon educates high school students in natural resources and environmental sciences. The program emphasizes the importance of environmental sensitivity while stressing a need to achieve a social, ecologic, and economic balance. The learning objectives emphasize awareness, knowledge, attitudes, and application. The Pennsylvania Envirothon provides future generations with the ability to be better equipped to address the complex natural resource concerns facing today's world as well as the challenges of tomorrow.

2010 Envirothon Events

The 27th annual Pennsylvania State Envirothon will be held at the PPL Montour Preserve on Wednesday, May 26th, 2010. This will be the sixth time that the PPL Montour Preserve has hosted the State Envirothon event. The Preserve is operated by the Pennsylvania Power and Light Corporation as an outdoor recreation and nature preserve. The Preserve is located north of Danville in Northcentral Pennsylvania, Montour County. The PPL Corporation is a long time corporate sponsor and partner to the Pennsylvania Envirothon.

The 23rd annual Canon Envirothon will be held at the University of California, Merced during the week of July 31 – August 7, 2010.

The current issue focus for the 2010 Envirothon events will be "Protection of Groundwater through Urban, Agricultural, and Environmental Planning."

How to become involved with the Envirothon

The Pennsylvania Envirothon welcomes new sponsors and partners to become involved with the state competition. Whether funding a specific component of the event (i.e. one of the three meals, awards for the oral component, the teacher's training session, or a specific testing station) or volunteering to help at the event, we invite you to join us and our mission to educate our high school students about the environment and environmental issues. The Pennsylvania Envirothon also needs volunteers to assist with conducting the state event – and possibly with county events. The Envirothon continues to grow each year in Pennsylvania and our partners, sponsors, and volunteers are critical to making the program the successful environmental competition that it is today.

If you would like additional information, please contact the Pennsylvania Envirothon office.

The Pennsylvania Envirothon is recognized as a 501 (c) 3 not-for-profit organization by the Internal Revenue Service.

Financial Report

Funding for the Pennsylvania Envirothon is provided through a public/private partnership. Program administration and one staff position is funded through grants received from the PA Department of Environmental Protection, PA Department of Community and Economic Development. Special projects are funded through grants sponsored by the PA Department of Agriculture/State Conservation Commission, PA Fish and Boat Commission, and Canon Envirothon. Private/corporate contributions are used to cover event costs. This report reflects the income and expenses needed to hold a one-day event without an oral presentation component, which costs an additional \$30,000.

2009 Operating Budget – One-day Event

EXPENSES Program Operations and Administration	
Coordinator Salary/Travel/Benefits	52,000.00
Director Travel Rent/Utilities/Supplies	1,000.00 3,750.00
Event	0,7 00.00
Awards/Scholarships	12,000.00
Food Services	3,240.00
Station/Program Administration Educational Resources	4,610.00 5,000.00
	3,000.00
Canon Envirothon Team Registration/Travel	3,786.00
State Dues	200.00
PA CEC Registration and Travel	500.00
Professional Services	
Audit/Organizational Fees	700.00
Insurance	900.00
Outreach	2 200 20
Newsletter, Postage, Coordinator Trainings	<u>2,000.00</u>
Total Program Expenses	\$89,686.00
INCOME	
Sponsorships – unrestricted Event – restricted	29,273.00 9,750.00
Grants – restricted	49,942.00
Cranto rectricted	10,012.00
Total Program Income	\$88,965.00
RETAINED ASSETS	
Fund Balance – Unrestricted Fund Balance – Restricted	66,594.00
	78,192.00
In-Kind Volunteer Contributions	\$48,350.00

Board of Directors

Chair Andy Patterson – District Manager, Huntingdon Conservation District

Vice-Chair Leigh Beamesderfer – Forester/Naturalist. Lebanon Conservation District

Secretary Robert Sweitzer - District Manager, Centre Conservation District

Treasurer Mary Ann Bower - District Manager, Clinton Conservation District

Donna Havs - Education Coordinator, Franklin Conservation District

Vince McCollum - Watershed Specialist, Cumberland Conservation District

Jan Hampton - District Manager, Cameron Conservation District

Corey Richmond - Watershed Specialist, Sullivan Conservation District

Rich Gulyas - Education Coordinator, Bradford Conservation District

Don Baker - Director/PACD Representative, Mifflin Conservation District

Richard Stumpf – Director/PACD Representative. Indiana Conservation District

William Kahler - Conservation Program Specialist/SCC Representative, Pennsylvania Department of Environmental Protection

Karen Ely – Water Program Specialist/SCC Representative, Pennsylvania Department of Environmental Protection

Associate Directors

Angie Foltz - Natural Resources Program Coordinator, Lebanon Conservation District

Mike Klimkos - Program Coordinator, Dirt & Gravel Road Maintenance Program, State Conservation Commission

Craig Bingman - District Manager, Snyder Conservation District

Erica Clark - Ag Conservation Technician, Mifflin Conservation District

Greg Reineke - Education Coordinator, Fulton Conservation District

Celina Seftas – Watershed Specialist, Huntingdon Conservation District

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Staff

Lorelle Steach - Program Coordinator

Message from the Chairman

It's about challenging our youth! The future of the earth depends on the youth of today. Soon they will be making decisions about what kind of car to drive, what detergent to buy, and whether to use paper. plastic, or cloth bags at the store. All of these decisions affect the environment and prompted the need for such education.

Pennsylvania Conservation Districts created North America's largest environmental education program/competition – The Envirothon – in 1979. Every year, volunteers for the Envirothon program work together to deliver environmental education to more than 15.000 high school-aged students across the Commonwealth. Thanks to the Envirothon, students in Pennsylvania have the opportunity to participate in hands-on learning activities and receive educational training in the areas of soils/land use, aquatic ecology, forestry, wildlife, and current environmental issues.

The Envirothon program is now offered to students in more than 45 states and nine Canadian provinces. The winning team from this year's State Envirothon represented Pennsylvania at the 2009 Canon Envirothon held August 2 - 8 at the University of North Carolina, Asheville. Pennsylvania continues to lead the nation in the number of competitions won, with eleven of 22 Canon Envirothon titles (North American level), and placing among the top five ninety percent of the time.

For over 26 years, the Pennsylvania Envirothon has been preparing the Commonwealth's youth to live in a green, more environmentally responsible manner.

Envirothon partners provide station resources, learning objectives, and tests for the Envirothon – as well as their expertise, support, and enthusiasm.

Envirothon sponsors provide financial means to provide a quality educational program, to organize a worthwhile event, and to sustain a program coordinator.

Our partners and sponsors make the Envirothon possible. A sincere congratulations and thanks are extended to everyone who helped make 2009 a successful Envirothon year.

> Andy Patterson, Chairman Pennsylvania Envirothon Board of Directors

Financial Sponsors

EXCO - North Coast Energy



Nestle Waters North America



Air Products Foundation



Canon Envirothon





The Hershey Company



Bayer HealthCare



Dutch Mill Bulbs



Pennsylvania Conservation Districts

Adams County Armstrong County Beaver County **Bedford County** Blair County **Bradford County** Cambria County Carbon County Centre County Chester County Columbia County Franklin County **Fulton County Huntingdon County Indiana County** Lackawanna County Lancaster County Lawrence County Lebanon County

Lehigh County Luzerne County Lycoming County McKean County Montgomery County Montour County Northampton County Northumberland County Perry County

Potter County Sullivan County Susquehanna County Tioga County **Union County** Washington County Wayne County

Westmoreland County **Wyoming County**

York County

Partnerships and Sponsorships

The Pennsylvania Envirothon is very fortunate to have such a group of environmentally sensitive partners and sponsors who provide the wherewithal to provide a sound educational program for thousands of high school-aged students.

Partners

Pennsylvania Department of Agriculture
Pennsylvania Department of Conservation and Natural Resources,
Bureau of Forestry and Bureau of State Parks
Pennsylvania Department of Education,
Office of Environment and Ecology
Pennsylvania Department of Environmental Protection
Pennsylvania Fish and Boat Commission
Pennsylvania Game Commission
U.S.D.A. Natural Resources Conservation Service

Program Sponsors

Pennsylvania's Sixty-six Conservation Districts Pennsylvania State Conservation Commission Pennsylvania Association of Conservation Districts

Tent/Station Sponsors

Cargill and the Conservation Fund Dwight Lewis Lumber The Hershey Company Lewis Lumber Products

Advisor Forum - 2009 Focus "Forestry Issues"

Northern Tier Hardwoods Association Pennsylvania DCNR Bureau of Forestry Penn State Cooperative Extension Pennsylvania Hardwoods Development Council Invasive Species Council

The Envirothon Experience

For over 26 years, high school teachers have been recognizing the value of the Envirothon experience. The Envirothon is the only competition in the nation that challenges students to think critically about the natural world and their role in it.



It's also the only competition that helps students develop the critical thinking skills they will need for a lifetime of finding balanced solutions to complex issues, such as how to encourage economic development and still preserve open space.

With such pressing long-term issues as water quality and quantity, sustainable energy,

watershed management, and agriculture, to name a few, the Envirothon shows tomorrow's leaders the positive and negative effects that individual actions have on the environment. Understanding the difference between renewable and nonrenewable resources, realizing environmental interactions and interdependencies, and becoming conscious of how each of us contributes to the overall quality of life is all part of the Envirothon experience.

The Envirothon is comprised of five areas on which students focus their study. As a team, written questions are answered in the subject areas of: soil/land use, forestry, aquatic ecology, wildlife, and current environmental issues (2009 – biodiversity in a changing world). A discovery station (non-testing) provides an opportunity for students to learn about other disciplines.

Team answers are evaluated by practicing environmental professionals – foresters, aquatic and wildlife biologists, soil scientists, and conservationists – who themselves deal with similar complex issues every day.

The team that scores the greatest number of points wins their respective county competition and moves onto the state Envirothon. The winning team of the state competition moves onto the Canon Envirothon, North America's largest environmental competition for high school students.

Envirothon at a Glance



Aquatic Ecology



Current Issues









Accomplishments

State Competition – A very successful one-day event was held this year in order to lessen the stress on everyone's (Envirothon's, school districts', conservation districts') budgets. It is our goal to provide a quality event, whether it is a one or two-day event. At this year's event students learned about biodiversity issues as they studied for the current issue topic and about Marcellus shale and natural gas drilling at the Discovery station.

Helping students make wise choices – High school students make dozens of choices that - for better or worse - affect the natural resources on which we depend. Today, the impact of those choices might seem fairly minor. But before too long, the choices these students make will become more complex; the ramifications more far-reaching as they begin to choose their career paths. Envirothon students are becoming doctors, conservationists, communication specialists, wildlife biologists, and leaders in our communities. Many former Envirothon students proclaim the Envirothon was the tool that helped them to make wise choices and balanced decisions as they enter life as young adults.

Act 48 Credit Hours for Educators - Envirothon team teachers/advisors participated in a "Forestry Issues" educational training during the state Envirothon competition. Representatives from the DCNR Bureau of Forestry, Penn State Cooperative Extension, Pennsylvania Hardwoods Development Council, and the Invasive Species Council shared information and hands-on training that focused on forest pest management, forest management and techniques, and the use of forestry tools. The Envirothon received a grant sponsored by the Northern Tier Hardwoods Association to purchase tree and log scale sticks for each participant. The Pennsylvania Department of Education provided Act 48 Credit Hours for those teachers who participated in the day's activities.

2012 Canon Envirothon Planning Begins – Pennsylvania's 2012 Canon Envirothon Committee held its first information and planning meeting. Many volunteers are beginning preparations to host the 25th anniversary of the North American competition which first began in Pennsylvania. If you would like to be a part of this historical event, contact the Pennsylvania Envirothon office.

Canon Envirothon

A five-member team of Pennsylvania high school students from Penncrest High School took top honors at the 2009 Canon Envirothon. This was announced on Friday, August 7th, during the closing ceremony of the weeklong North American environmental education competition held



at the University of North Carolina - Asheville, and sponsored by Canon U.S.A., Inc.

More than 265 teenagers from 45 U.S. states and seven Canadian provinces studied environmental issues and resource conservation, while competing for a share of more than \$125,000 in scholarships and Canon products.

The first place Pennsylvania team received a total of \$25,000 in Canon Envirothon scholarships along with Canon equipment for their advisor and sponsoring agency. North Carolina (\$20,000) and Maryland (\$15,000) placed second and third respectively. The fourth place team from Delaware received \$10,000. The fifth place team from Missouri received \$7,500. The Pennsylvania team was also recognized for receiving the highest scores at the aquatic ecology and wildlife stations. For more 2009 competition information, visit the Canon Envirothon website - www.envirothon.org.

The Canon Envirothon Champion team pictured below includes: Mark Samilenko and Amanda Meltz, advisors, Katie Davis, Katie Ferguson, Elizabeth Freeburg, Alex Senko, and Jennifer Walker.



Envirothon at a Glance





Forestry





Wildlife









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2009 Competition Summary







First Place Penncrest High School Delaware County

Second Place
Future Hope Home Learners
Snyder County

Third Place Warren Area High School Warren County

In 2009, more than 300 high-school students representing 65 counties participated in the twenty-sixth Pennsylvania Envirothon. The event was held at the Pennsylvania DCNR Bald Eagle State Park located in Howard on May 19.

The State Envirothon is the outcome of 67 county competitions that take place during the months of April and May and involves more than 15,000 teenagers throughout the Commonwealth.

Awards were presented to the top 10 high scoring teams. For the past five years, the Envirothon awarded scholarships totaling over \$9,000 for 15 students on the top three teams. The scholarships are sponsored by the Pennsylvania Department of Agriculture and the State Conservation Commission. To date, we have awarded \$45,000 in scholarships to more than 75 students.

Rounding out the Top Ten

Fourth - Erie County – North East High School
Fifth - Cumberland County – Cedar Cliff High School
Sixth - York County – Homeschoolers
Seventh - Greene County – Carmichaels Area High School
Eighth - Schuylkill County – Blue Mountain High School
Ninth - Bedford County – Northern Bedford County High School
Tenth - Bradford County – Canton High School

Top Station Scores

Delaware County – Aquatic Ecology, Forestry, and Soil/Land Use Snyder County – Forestry Greene County – Wildlife Warren County – Current Issue

2009 Current Issue Theme "Biodiversity in a Changing World"

The rich tapestry of life on our planet has been shaped by forces such as: changes in the planet's crust, ice ages, fire, and interaction among species. Now, it is increasingly being altered by humans. The impacts of human activities reach into every corner of the natural world. For instance, between one third and one half of the Earth's land surface has been substantially transformed by agriculture, urbanization, and commercial activities of various kinds; about one quarter of all bird species have been driven to extinction; and more than one half of all accessible surface water, as well as an enormous quantity of groundwater, is diverted for human uses. It is estimated that 25% of all species could go extinct in the next ten years.

These uses have brought unquestionable benefits to human welfare. But the upshot of this growing human domination of the planet is that no ecosystem on Earth is free from pervasive human influence.

The term 'biodiversity' is indeed commonly used to describe the number, variety, and variability of living organisms. It has become a widespread practice to define biodiversity in terms of genes, species, and ecosystems, corresponding to three fundamental levels of biological organization.

It is evident that a certain level of biological diversity is necessary to provide the material basis of human life: at one level to maintain the biosphere as a functioning system and, at another, to provide the basic materials for agriculture and other needs.

Over geological time, all species have a finite span of existence. Species extinction is therefore a natural process, which occurs without the intervention of man. However, it is beyond question that extinctions caused directly or indirectly by man are occurring at a rate which far exceeds any reasonable estimates of background extinction rates. Management of our ecosystems intended to maintain one facet of biodiversity will not necessarily maintain another facet which may be just as important.

Students preparing for the Envirothon researched a variety of questions and issues, including the following: Biodiversity changes as man manipulates his environment - is this good or bad? Biodiversity changes are a natural process - how does acceleration of our environmental changes affect it? Biodiversity has changed or changes as a result of our activities.