

# Pennsylvania Envirothon

2012 Annual Report

ACCEPT THE NATURAL CHALLENGE!

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

## **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, ecological, and economic balance. The learning objectives emphasize awareness, knowledge, and attitudes through outdoor hands-on applications while addressing the complex natural resource concerns facing today's world as well as the challenges of tomorrow.

# **Table of Contents**

Our Mission	
Board of Directors	4
Message from the Chairman	5
The Envirothon Experience	
Envirothon at a Glance	7 - 8
2012 Competition Summary	
2012 Current Issue Theme	
Canon Envirothon	11
Partnerships and Sponsorships	12
Financial Sponsors	
Financial Report	
Accomplishments	
Canon Envirothon 25 <sup>th</sup> Anniversary	16 - 18
2013 Envirothon Events	19
How to Become Involved	19

#### **Board of Directors**

Chairman

William Kahler - Conservation Program Specialist, PA DEP/SCC

Vice-Chair

Vince McCollum - Watershed Specialist, Cumberland Conservation District

Secretary

Robert Sweitzer – District Manager, Centre Conservation District

Treasurer

Richard Stumpf – Director, Indiana Conservation District/PACD

Mary Ann Bower - District Manager, Clinton Conservation District

Celina Seftas – Watershed Specialist, Huntingdon Conservation District

Donna Hays - Education Coordinator, Franklin Conservation District

Vince McCollum - Watershed Specialist, Cumberland Conservation District

Corey Richmond - Watershed Specialist, Sullivan Conservation District

Erica Smith – Ag Conservation Technician, Mifflin Conservation District

Cheryl Brobst – Director, Columbia Conservation District/PACD

Karen Ely – Dirt & Gravel Road Program Coordinator, PA DEP/SCC

Teddi Stark – Watershed Specialist, Juniata Conservation District

Jason Winey – Watershed Specialist, Snyder Conservation District

#### Associate Directors

Craig Bingman – District Manager, Snyder Conservation District

Greg Reineke - Education Coordinator, Fulton Conservation District

Irvil Kear - Volunteer, Schuylkill County

Andy Patterson – District Manager, Huntingdon Conservation District

Jan Hampton – District Manager, Cameron Conservation District

Jackie Ritko – Resource Supervisor, Cambria Conservation District

Renee Swineford – Administrative Assistant, Snyder Conservation District

#### 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 schoolaged 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 2012 Canon Envirothon held July 22 – 27 at the Susquehanna University, Selinsgrove, Pennsylvania. Pennsylvania continues to lead the nation in the number of competitions won, with eleven of twenty-four Canon Envirothon titles (North American level), and placing among the top five ninety percent of the time.

For over twenty-nine 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 offer financial means for 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 2012 a successful Envirothon year.

William Kahler, Chairman Pennsylvania Envirothon Board of Director

## The Envirothon Experience

For over twenty-eight 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 about 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 are 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 (2012 – non-point source pollution and low impact development). A discovery station (non-testing) provides an opportunity for students to learn about other disciplines.

Team answers are evaluated by practicing natural resource 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 its respective county competition and moves on to the state Envirothon. The winning team of the state competition moves onto the Canon Envirothon, North America's largest natural resource education competition for high school students.

# **Envirothon at a Glance**



# **Aquatic Ecology**











# **Current Issues**





# **Envirothon at a Glance**



Forestry









Wildlife







## 2012 Competition Summary







First Place MMI Preparatory Luzerne County

Second Place Penncrest High School Delaware County

Third Place Homeschoolers York County

In 2012, more than 300 high-school students representing 62 counties participated in the twenty-seventh Pennsylvania Envirothon. The event was held on May 22 and 23 at the University of Pittsburgh at Johnstown, Cambria County.

The State Envirothon is the outcome of 66 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 ten high scoring teams. For the past six years, the Envirothon awarded scholarships totaling over \$9,000 for fifteen students on the top three teams. The scholarships are sponsored by EXCO Resources (PA) and Pennsylvania Envirothon. To date, we have awarded over \$69,000 in scholarships to more than 115 students.

## Rounding out the Top Ten

Fourth - Schuylkill County - Blue Mountain High School

Fifth – Greene County – Carmichaels Area High School

Sixth - Centre County - Bald Eagle High School

Seventh - Indiana County - United Jr. Sr. High School

Eighth - Cambria County - Northern Cambria County High School

Ninth – Lebanon County – Easter Lebanon County High School

Tenth – Chester County – Downingtown East High School

#### 2012 Current Issue Theme

#### "Non-Point Source Pollution and Low Impact Development"

**Nonpoint source pollution**, unlike pollution from industrial and sewage treatment plants, can come from many different sources. Stormwater runoff carries pollutants into our streams, rivers, reservoirs, and other bodies of water.

An estimated 60 percent of current water pollution is attributed to stormwater runoff. Nonpoint source pollution can contaminate drinking water, destroy wildlife habitat, close beaches, kill fish, and cause many other serious environmental and public health problems. Every year, millions of dollars are spent to restore and protect areas damaged by nonpoint source pollutants. Stormwater has been identified as one of the leading sources of pollution for all water body types in the United States.

One of the most exciting new trends in managing stormwater runoff is the increased use of **Low Impact Development (LID)** to help protect and restore water quality. LID comprises a set of approaches and practices that are designed to reduce runoff of water and pollutants from the site at which they are generated. By means of infiltration, evapotranspiration, and reuse of rainwater, LID techniques manage water and water pollutants at the source and thereby prevent or reduce the impact of development on rivers, streams, lakes, coastal waters, and ground water.

LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions

Although the increase in application of these practices is growing rapidly, data regarding both the effectiveness of these practices and their costs remain limited. In the vast majority of cases, the U.S. Environmental Protection Agency (EPA) has found that implementing well-chosen LID practices saves money for developers, property owners, and communities while protecting and restoring water quality.

As water becomes an ever-increasing issue nationwide, managing our stormwater properly is not only a green technology, it becomes a necessity. And through the use of Low Impact Development strategies, properly managing stormwater is something all of us can do.

#### **Canon Envirothon**

A five-member team of students from MMI Preparatory School located in Freeland Luzerne County earned the honor to represent Pennsylvania in the 2012 Canon Envirothon by winning the Pennsylvania state competition.



The team respectively placed 15th out of 54 teams that represented 44 states, nine Canadian

provinces, and one Canadian territory. The team received Canon cameras and printers.

MMI Envirothon advisor Michael Mele said, "The entire experience was engaging and immersive, and our team representing MMI and Pennsylvania did an amazing job. The Canon event created the perfect scenario to educate and learn by stimulating all the senses in the field, and allowed the groups to demonstrate what they have learned about 'low-impact development' via the oral component. I am honored to work with a truly motivated, focused, and dedicated group. I am very proud of my team and my co-advisor, Jessica Polashenski, for their dedicated effort, passion, and grace, and I look forward to working with them to give it another try in 2013!"



MMI's team was made up of: Michael Mele (advisor), Anjni Patel, David Polashenski, Brianna Nocchi, Rebecca Noga, and Farrah Qadri.

For more information and photos, visit the Canon Envirothon website at <a href="https://www.envirothon.org">www.envirothon.org</a>.

## Partnerships and Sponsorships

The Pennsylvania Envirothon is very fortunate to have 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 -

2012 Focus "Integrated Pest Mangement and Pesticide Education"

Penn State Pesticide Education Program

## **Financial Sponsors**

#### **PA Department of Environmental Resources**



#### **American Honda Foundation**



#### **PPL Corporation**



#### **Air Products Foundation**



### **Bayer HealthCare**



#### **PA Outdoor Writers Association**



### **PA Trappers Association**



## **EXCO - North Coast Energy**



#### **Canon Envirothon**



## **Pennsylvania County Conservation Districts**

#### Friends of Envirothon

Andy Patterson

Hoss's Community Fundraiser

## **Financial Report**

Funding for the Pennsylvania Envirothon is provided through a public/private partnership. Program administration and one staff position are supported through grants received from the PA Department of Environmental Protection and 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 two-day event with an oral presentation component.

#### 2012 Financial Report - reported by Ritchey, Ritchey & Koontz CPA

Revenue		
Donations	46,892.00	
Government Grants	127,553.00	
Program Activities	142,728.00	
Fundraising	4,234.00	
Interest	61.00	
Registration	<u>24,634.00</u>	
Total Revenue		\$346,102.00
Expenditures		
Event Expense	250,075.00	
Outreach Expense	4,600.00	
Donations	11,500.00	
Program Administration	<u>56,399.00</u>	
Total Expenditures		(322,574.00)
Change in Net Assets		23,528.00
Net Assets, January 1		147,744.00
Net Assets, December 31		171,272.00

## Accomplishments

**State Competition** – A very successful two-day event was held this year. At this year's event, students learned about "*Going Green with LID technology to reduce NPS*" as they studied for the current issue topic and they learned about natural biodiversity 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 will be more farreaching 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 entered life as young adults.

Act 48 Credit Hours for Educators – Envirothon team teachers and advisors participated in a Pesticide Education Program. Sooner or later, we are all pestered by pests. Whether it's ants in the kitchen or weeds in the garden, pests can be annoying and bothersome. At the same time we are concerned that the pesticides we use to control pests can cause problems too. These were some of the questions discussed during the program.

**2012 Canon Envirothon** – Pennsylvania's 2012 Canon Envirothon Committee hosted a successful 25<sup>th</sup> anniversary of the North American competition which first began in Pennsylvania.

# 2012 Canon Envirothon - 25th Anniversary

"There's nothing better than this," was the consensus of this year's Canon Envirothon hosted by the Envirothon July 22 Pennsylvania through 26 at the Susquehanna University in Selinsgrove. **Teams** from across 44 states, nine Canadian provinces and one Canadian territory



came together to celebrate 25 years of Envirothon and to determine North America's leading high school natural resource conservationists.

On Sunday, July 22nd, Pennsylvania welcomed 54 five-member teams to Susquehanna University. The teams were introduced as they flew their school flags during the traditional opening ceremony's parade of flags. During the trading session, students shared and bartered with each other for goods that represented their region.



One of the first official orders of business was to acclimate the teams to the Northeast region of the U.S. Students received trainings about Pennsylvania's soils and land use, aquatic ecology, forest ecology, wildlife habitats, and

nonpoint source pollution and low impact development at R. B. Winter State park.

As part of the education day, students were also given the opportunity to learn about and enjoy some of Pennsylvania's natural resource highlights such as: fly fishing, Atlatl, backwoods hiking, watersheds, falconry, geocaching, and the elk reintroduction program.





Field testing took place at the PPL Montour Preserve located in Danville. PPL is a longtime partner and sponsor of the Pennsylvania Envirothon. The Montour Preserve was a picturesque area, where the five testing stations were set up with hands-on experiments

and field evaluation scenarios to complete the testing.

For the final segment of competition, teams received an explanation of the oral presentation scenario from several planning and natural resource professionals in order to prepare a 20-minute presentation which was delivered to panels of judges.



Upon completion of the presentations and after the scores were tallied, the students put on their best dress to attend the semi-formal banquet held in the Susquehanna University

Field House.

Teams and guests listened to encouraging words shared by Envirothon alumni, Steve Gettle and Michelle Henry, Mr. Bunji Yano, Canon U.S.A., and many other special guest speakers.



At stake for each team was a share of \$120,000 in scholarships and Canon products. The top Envirothon award was presented to Pembroke High School in Kansas City, Missouri.

A huge "Thanks" to our volunteers, sponsors, partners, competitors, advisors, and the Canon Envirothon Committee for helping us to make this one of the best Canon Envirothon events while celebrating 25 years of Envirothon.

## 2012 Canon Envirothon - Sponsors and Partners

Canon U.S.A., Inc.

Canon Canada

Canon Envirothon

U.S. Environmental Protection Agency

Pennsylvania Department of Environmental Protection Section 319 of the Clean Water Act

The Hershey Company

Foundation for Pennsylvania Watersheds

Talisman Energy (USA)

Pennsylvania Department of Conservation and Natural Resources

Pennsylvania Association of Conservation Districts

State Conservation commission

U.S.D.A. Natural Resources Conservation Service

National Conservation Foundation

National Association of Conservation Districts

NACD Presidents Association

U.S. Forest Service

PPI

Pennsylvania Department of Agriculture

Pennsylvania Fish and Boat Commission

Pennsylvania Game Commission

Pennsylvania Sea Grant

Pennsylvania Trout Unlimited

R. B. Winter State Park

R. B. Winter and Lloyd Wilson Chapters of Trout Unlimited

Susquehanna Chapter of Trout Unlimited

Stroud Water Research Center

Selinsgrove Ford

Land Studies

American Planning Association, Pennsylvania Chapter

Susquehanna University

Pennsylvania's County Conservation Districts

Aramark

Van Wagner

Snyder County Commissioner Joseph Kantz

Glen Waldeck and The Herd of Turtles

#### 2013 Envirothon Events

The 30<sup>th</sup> annual Pennsylvania State Envirothon will be held at the Juniata College, Huntingdon on Tuesday and Wednesday, May 21<sup>st</sup> and 22<sup>nd</sup>, 2013. The current issue focus for the 2013 Envirothon events will be "Grazing Livestock for Improved Herd Health and Land Management."

The 26<sup>th</sup> annual North American Envirothon will be held at Montana State University, Bozeman, MT during the week of August 4 – 10, 2013.

#### 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 teachers' training session, or a specific testing station) or volunteering to help at the event, we invite you to join us 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. In addition, the program is an approved organization by the Pennsylvania Department of Community and Economic Development office to receive corporate contributions under the Educational Improvement Tax Credit program

## Pennsylvania Envirothon Inc.

702 West Pitt Street, Suite 3 Bedford, PA 15522

Phone: (814) 623-7900 ext. 111

Fax: (814) 623-0481

E-mail: paenvirothon@pennswoods.net

www.envirothonpa.org