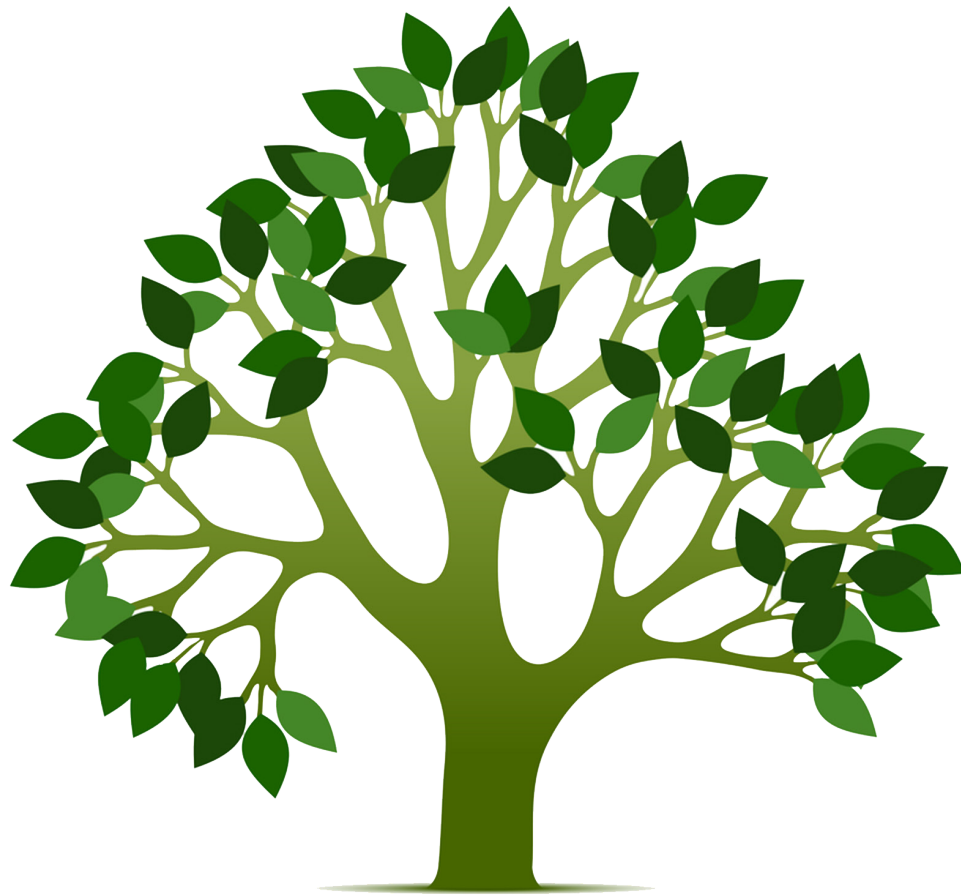


“Strengthening Youth Involvement
Through Conservation”

C E T Y
Annual Report
2014



Calvert Environmental Trust for Youth



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P.O. Box 3348 • 489 Main Street
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MISSION STATEMENT:

The mission of the Calvert Environmental Trust for Youth is to provide a financial mechanism whereby projects that have positive influence on youth and/or the environment can be adequately funded through a local entity.

VISION STATEMENT:

The vision of the Calvert Environmental Trust for Youth is to see an improvement in quality-based youth and environmental activities throughout the region.

In 1996 the Environmental Trust for Youth was formed to provide a funding mechanism that would support environmental and youth activities in Calvert County. Over \$100,000 was raised from local contributors within our first year. An additional \$335,600 has been contributed since then. The interest earned from these funds is used to support environmental projects throughout the county. Since its inception, the Trust has awarded \$146,266 in grants. This year, we have requests for over \$16,700 in grants. The Trust appreciates all funding received from local contributors and is now in the process of applying for major foundation funding to match local support.



The Calvert Environmental Trust for Youth has 501(c)3 status as a nonprofit organization.

All Calvert Environmental Trust for Youth programs and services are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status or handicap.



Calvert Environmental Trust for Youth Projects Fiscal Year 2014

2014 Calvert County Envirothon	\$1,682
CHESPAX: Third Grade Terrapin Program	\$585
Calvert County 4-H (Horse Bowl Team Shirts)	\$295
Sunderland Elementary School Environmental Club	\$1,300
Huntingtown Elementary School (Destination Imagination)	\$300
Lorax Environmental Club "Wonders of the Environment" Day	\$700
Boy Scout Troop 347 Pond Improvement	\$150
Huntingtown High Environmental Club	\$1,000
Pipeline: Creating a Stewardship Program for Calvert Youth	\$1,000
Spider Hall Farm LLC Agriculture Lessons	\$2,000
4-H Livestock Auction at Calvert County Fair	\$6,920
Youth Soil Science and Conservation Education	\$864

TOTAL

\$16,796



CETY PROJECTS

2014 Envirothon

Each year Calvert Soil Conservation District helps sponsor the County Envirothon. The Envirothon is a competition designed for high school students that focuses on the importance of natural resources and uses the outdoors as an alternative to classroom learning. This environmental competition for high school students cultivates a passion for environmental science. An outdoor training session is held at Kings Landing Park several months before the competition. Thanks to Susan Davis, USDA Natural Resources Conservation Soil Scientist, who provided training to county students in the soil pits at Kings Landing, the students earned the highest scores in soils ever. The winners of the county competition will go on to compete in the state competition, and those winners will compete in the national competition. Huntingtown High School students took first place in the Calvert County Envirothon. Congratulations!



The winning team from Huntingtown High School, from left: Daniel Henderson, Alejandro Smith, Elijah Sanchez, Stefan Hernandez, Daniel Garcia, and teacher Grace Hanners.

CHESPAX - Third Grade Terrapin Program

CHESPAX would like to thank CETY for funding the terrapin instructional game boards for the third grade science unit of the Calvert County Public Schools. As part of the third grade science curriculum, students learn about the habitat requirements of the Diamondback Terrapin, threats that they encounter during their life cycle, and what can be done to help protect populations in the Chesapeake Bay. With the financial support from CETY, CHESPAX developed an instructional game that was incorporated into the science unit to help students learn about the dangers faced by terrapins



Terrapin game board developed by CHESPAX.

While students participated in the game, they read about the human and natural activities that could affect a terrapin's ability to survive. Students applied what they learned from the instructional game during their field experience at Flag Ponds Nature Park where they identified whether this was a good place for terrapins. Through hands-on research, videos, and instructional games, local third graders have been able to gain a vast knowledge of our state reptile, the Diamondback Terrapin, and have taken action to preserve the population of future generations.

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Students playing the Terrapin game.

Calvert County 4-H (Horse Bowl Team Shirts)

The 2014 Maryland 4-H Horse Bowl was held on March 19, 2014. There were 13 members participating on the junior, intermediate, and senior teams. Through the leadership, dedication and mentoring of outstanding volunteers, the children worked well together and decided to compete in the June 4-H Hippology and Horse Judging events as well.

To give the Horse Bowl Teams the same unifying elements as the other counties, Calvert County 4-H members wore their matching shirts, funded by CETY. Thank you to CETY for your support! The children worked very hard practicing and studying to prepare for the Horse Bowl. The shirts enabled them to have a true team identity for the contest and was instrumental in acting as a motivator and team builder. The Junior Horse Bowl Team earned sixth place in the contest. The Intermediate Team placed fifth and Lesley Porterfield placed eighth highest individual in the Intermediate Division. The Senior Team finished in twelfth place.



Top photo: Junior Team members, front row from left: Hannah Jett, Carrie Jones, Hayley Spicknall, and Ella Morrissey. Back row from left: Coaches Carol Spicknall and Debbie Jones.



Middle Photo: Intermediate Team Members, front row from left: Lauren Butz, Lesley Porterfield, Savannah Dobbins, and Kate Sturge. Back row from left: Coach Cathy Porterfield, Wyatt Holtery and Coach Sue Holtery.



Senior Team members from left: Coach Natalie Garner, Sabrina Dobbins, Abby Krohn, Taylor Garner, Lexy Stonestreet, and Coach Casey Stonestreet.

Sunderland Elementary School Environmental Club

The fourth grade students of Sunderland Elementary School would like to thank CETY for the generous support of their curriculum. They were able to learn about social studies and science in ways that would not have been possible without the grant the Calvert Environmental Trust for Youth provided.



In late October, the Maryland Agricultural Education Foundation (MAEF) mobile agricultural classroom stood in the schoolyard as a beacon of educational sunshine to those who entered it. Each class was able to visit it every day for about an hour. Under the direction of MAEF teacher Mrs. Kelly Swann, they were able to participate in five interactive lessons.

Corn: The Environmentally Friendly Crop

Students learned about corn, including the amazing fact that one plant produces between 600 and 1,000 seeds. They discussed the importance of corn for feeding animals and as an ingredient in many foods that people eat. Students were amazed at the fact that corn was an ingredient in marshmallows and that packing foam could be made from corn. During an investigation, it became clear to students that corn is the best choice for making packing foam because it biodegrades. They were able to see that the corn foam dissolved when placed in water. The importance of materials that biodegrade was discussed, and students are now able to encourage their parents to look for more environmentally-friendly products.

Sunderland Elementary School Environmental Club (continued)

CSI: Candy Science Investigators

Anything that involves candy will interest students, and this was a great example! Using baking soda and water, students were able to test six different candies to see if they have acid or wax/oil as an ingredient. Specific measurements were required. The students observed chemical reactions by seeing if bubbles were created. They were very interested to learn the ingredients of some of their favorite candies. I am sure some went home and tested other treats!

Glue from Milk

The mobile classroom was filled with chemists and laboratory technicians on this day as students produced glue from milk and tested the strength of their glue against Elmer's glue. A peel test, tensile strength test, and shear strength test were conducted. They were impressed with the strength from the glue they had created.



Here, There and Everywhere

Map skills are a big part of geography, taught each year in elementary school. With this lesson, students connected farm crops and animals to the products they produce. They then used map skills to highlight counties that are the highest producers. The Social Studies teachers were thrilled with the connection to geography skills.

Mighty Smooth Bean

The awesomeness of soybeans was brought forth in this lesson. Students had no idea that soybeans are around them so much, from food to fabric softeners and even shampoo. Biodiesel fuel and soybean crayons were discussed. Then came the best part, for the girls, especially, when the students were able to make their own lip balm using all natural ingredients.



The hands-on aspect of each of these well-developed lessons gave the students a new-found respect for our land, farmers, and our natural resources. Mrs. Swann, whose family has a farm in Owings, was able to bring her own personal experiences to her lessons, making them that much richer and meaningful. The variety of lessons available from MAEF taught the students the many different aspects of agriculture. Colorful, student-friendly pamphlets that the students were able to bring home to share with their families will teach others what was learned during the week. Fourth grade teacher Mrs. Marcie Ellis had the best comment when talking about the experiences the students had.

She described a student who in the classroom was quiet and struggled with a lot of the material taught. In the mobile agricultural lab, however, he was a shining star. He had a lot of knowledge about and interest in agriculture. He excelled at the interactive activities and added his own previous knowledge to the lessons taught. Thank you, CETY, for providing this wonderful educational experience for him and all the fourth grade students of Sunderland Elementary School.

Huntingtown Elementary School (Destination Imagination)

During the 2013-2014 school year, the Huntingtown Elementary School PTA introduced the Destination Imagination program to the students. With high interest and great enthusiasm, many students chose to sign up! A particular team, the HES 7 Senses, emerged and blossomed with this amazing opportunity.

A team of up to seven students select a challenge to solve that is related to science, the arts, technical design, or service learning. The Challenge Program allows students to learn STEM concepts through self-directed, maker-style experiences and provides them with an enriching space for them to discover, explore, take risks and ignite their passions in areas they may not otherwise be exposed.

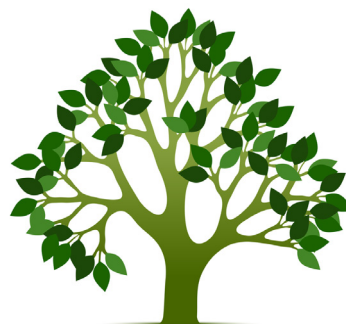
The HES 7 Senses selected the Technical Challenge, Dig In, and had to design a detection device that would find hidden objects in containers that a human would not be able to locate. Another component of the challenge was to integrate the detection device in a story. After many meetings, exploration, and research, the HES 7 Senses created a “Fish-O-Mometer” that would detect the heat radiating from fish trapped in plastic containers floating the Great Pacific Garbage Patch. The “fish” were actually hand warmers and the device was made of a liquid crystal sheet that is highly sensitive to temperature change.

With the uniqueness of the solution and the amazing teamwork of the 7 Senses, this first year Destination Imagination team placed third place in the regional competition held at South River High School. Placing third allowed the team to compete in the State Competition held at UMBC. With their incredible performance, they placed second in the state of Maryland, which provided this team the opportunity to compete at the Global level in Knoxville, Tennessee in May of 2014.

The HES 7 Senses would like to thank the Calvert Environmental Trust for Youth for their support of \$300. This money helped with the added cost of challenge solution changes, the extra materials necessary for the changes, and provided funds for the \$10,000 cost of this education opportunity for the team!



Team 7 Senses placed third regionally and second in the state of Maryland. The team went on to compete at the global level in Knoxville, Tennessee.



Wonders of the Environment Day

“Learn outside!” is one of the Chesapeake Bay Foundation’s motto, stressing that the best way to develop an appreciation for the environment is to get out in it. This is exactly what 88 third-graders from Sunderland Elementary School were able to do on April 24, 2014. This typical warm spring day was WOE (Wonders of the Environment Day), sponsored by the Lorax environmental club at NHS, and paid for with a generous grant from CETY. During the day, outdoor lessons in stream health, the importance of forests, the fun in recycling, and general care of the watershed were taught by high school students who had planned and prepared for weeks ahead of this event. The Lorax club has run this event annually for ten years, delivering great lessons and a good time to the young visitors.

The day was well organized, divided into four teaching sessions with elementary classes rotating through them. A short period was reserved for lunch, and time was scheduled for face-painting, crafts, and a short play. Sunderland students boarded the bus back to their home school in the afternoon, tired but happy and carrying a goodie bag to commemorate the day. Northern students were left to clean up the school grounds and board their buses, also tired but happy and proud of the inspiration they may have been to younger learners. Both groups plan to participate next spring.



Boy Scout Troop 347 Pond Improvement

Scott Taylor Graves, a member of Boy Scout Troop 347 sponsored by Church by the Chesapeake in Port Republic, planned and executed his Eagle Scout Project at King’s Landing in Huntingtown. His project was done in support of the Calvert County Public School System CHESPAX Program. The program involved cleaning up and landscaping around an existing small pond and adapting solar power to a pump and a fountain to circulate water in the pond. This project required cleaning the pond, installing a flagstone border around the pond, running a power cable from a solar array to the pond and attaching a pump to a fountain to circulate water. Native plants and shrubs were added around the pond.

The project took eight scouts and leaders 72 hours to complete. This project was supported in part by the Calvert Environmental Trust for Youth with a donation of \$150.



Scout members installing the fountain.



Planting native plants.



New plants and completed pond.

Huntingtown High School Herb and Vegetable Garden



Huntingtown High School would like to thank the Calvert Environmental Trust for Youth for granting us funding to further improve our campus. Funds from the grant were used to establish an herb and vegetable garden. The garden area was bordered with long beds to have milkweed planted in the spring to provide monarch butterfly habitat in hopes of increasing their declining populations, as well as improve the aesthetics of area. Students and staff worked on this project by building raised beds, adding nutrient rich leafgro to the beds and mulching in-between the beds.

This past spring, Ms. McQuighan planted herbs and vegetables in the raised beds and has been using them in her Cultures and Cuisine classes. The caring and maintenance of the gardens by students in Ms. McQuighan's classes will provide them with a sense of accomplishment, healthy eating, and supporting our Buy Local initiative.

In the future, we hope to expand the experience with the garden to include school composting to teach students and staff about the benefits of creating more nutrient rich soil while reducing solid waste. We also hope to create signage to help educate the community about the benefits of growing your own food, buying local, composting, and creating habitat for native pollinators.



Pipeline: Creating a Stewardship Program for Calvert Youth

The Calvert Stewards program was developed to encourage the local community to volunteer for a variety of projects in Calvert County nature parks. Our long-term goal is to create a pipeline of engaged youth that will continue their stewardship of the parks into adulthood. This will benefit the participants, the parks and the community.



In 2014, BCNES received a grant from the Calvert Environmental Trust for Youth to support this initiative. This grant supported two events: boardwalk repairs at Flag Ponds and a tree planting at Battle Creek Cypress Swamp. On May 31, the Calvert Stewards team met at Flag Ponds to repair an old and damaged section of the Duncan's Pond trail boardwalk. This boardwalk is an important part of the trail, leading park visitors through sensitive wetlands and a pond-side area. On Thursday, October 30, approximately 20 members of the freshman Environmental Science class from Huntingtown High School arrived at Battle Creek Cypress Swamp ready to work. The students pulled Russian Olive, a non-native invasive that was taking over the understory in the woodlands near the park entrance and picnic pavilions.



On a blustery rainy Saturday, November 1, a hardy crew of Calvert Stewards donned their raingear and headed out to complete the tree planting project. Approximately two dozen native hollies and dogwoods now line the northern side of the Cypress Swamp entrance. Countless invasives were moved to create openings for native species to live on the forest floor.

This project had the true spirit of partnership. Upon reviewing the grant, Brian Stupak of the forestry board donated the holly and dogwood trees for the Battle Creek Cypress Swamp planting. The Huntingtown High School students joined forces with the Calvert Stewards. All in all, a wonderful way to engage partners - young and old - in this project.

Spider Hall Farm LLC Agriculture Education

The purpose of Spider Hall Farm LLC Agriculture Education is to share the importance of agriculture in our lives. Agriculture education activities are conducted at the farm and also within classrooms in and beyond Southern Maryland. The lessons

are designed to show each person is responsible for the land, water and air for the health of our earth and our own health and well-being. We are dependent on the farms, farmers and agricultural entities throughout our world. In addition to our dependence on land, water and air, our lessons also focus on healthy lifestyles, the three R's - recycle, reduce and reuse and the part each of us has to keep the environment safe and healthy.

The target audience is age 3-90 years of age. Approximately 1,000/1,500 students hear the message each year. The items purchased through the CETY grant do just that:



- Garden plant, fruit and food shapes work together to show the elements from Farm to Table.
- Plain puzzles are used for lessons on Maryland Agriculture through mapping, showing how wholeness is vital to healthy living/lifestyles, etc.
- Beads and pipe cleaners offer tactile examples of seed to plant and are worn as bracelets after the lesson on plants.
- Feed bags are made using snack material to represent the areas of the environment that are critical to us such as land, water, air, etc.
- Farmer's charms are made as the culminating lesson after a discussion of what a farmer does for us (using books, puppets, dry erase boards, felt characters and toy tractors to represent the farmer).
- Maps, books, toy models of plants, food, insects, puppets, toy machinery, compost buckets, letter shapes and number shapes are all used in lessons showing the importance of agriculture in our lives.
- Signs designed to share information about agriculture are carried to schools and shown during lessons.
- Buckets are used to store lesson materials and are left for teachers to use in their classrooms.



All in all, Mrs. Moo, the Ag Educator of Spider Hall Farm, uses materials purchased through the CETY grant in a variety of ways. These materials are vitally important to our mission as they hold a key to a lasting impression on the children and adult audiences of the importance of agriculture in our lives.





4-H Club at the Calvert County Fair

The 4-H Youth Livestock Auction is held during the Calvert County Fair. This is the time when animals that 4-H youth have cared for are sold to the public. It is the final step in their livestock project where the educational marketing aspects are put into action. Each year the Calvert Environmental Trust for Youth supports the 4-H Club by purchasing animals and donating them back to the club at the 4-H Livestock Auction.

