## 2017 Stroud Center Education Department Highlights

https://stroudcenter.org/education https://wikiwatershed.org

## PROGRAMMATIC SUCCESSES

- Total # face-to-face impacts through programs, conferences, trainings: 7,379
  - o K-12 students: 4,142 (55%)
  - o Colleges & University Students: 24 (<1%)
  - Training & Professional Development: 548 (7%)
  - o Community Engagement Events, Estimated # of attendees: 2,360 (32%)
  - o Conference & Event Presentations, Estimated # of attendees at Stroud Center Sessions: 305 (5%)
- **157** program contact days
- **61** different schools and organizations
- Outreach in 15 U.S. states (KS, IA, PA, GA, VA, CA, NC, MN, MD, MT, WV, MI, TX, DE, NJ) and Costa Rica
- 28 training and professional development workshops
- 14 presentations at professional conferences and events
- New staff/interns: 1 additional full-time Education Specialist, 1 SCA intern (4-month experience); 4 new part-time
  educators, for a total of 11 educators at year-end bringing over 231 years of experience to our programs
- 6 tree planting/monitoring events with students ranging from 10-years of age to college level
- Assisted with two summer river treks: Coatesville Youth Initiative-Brandywine Trek and Schuylkill Headwaters Association-Schuylkill Acts & Impacts
- 1st summer Creek Explorers week-long day camp for upper elementary students held at West Chester University
- New & expanded partnerships/schools/programs to note:
  - o All of West Chester School District's 4<sup>th</sup> graders (**10** schools) during the month of October
  - o Girl Scouts & Boy Scouts including expanded partnership with Chester County Council, BSA
  - o Temple-Ambler, Izaak Walton League, Sierra Club, Land Health Institute
  - o Professional development and training workshop partners: Millersville University WETI field station, Chester County Intermediate Unit, Longwood Gardens, PA Master Watershed Stewards
  - Schools: Germantown Academy, Phoenixville M.S., The Pilot School, Renaissance Charter School, Hopewell Elementary, Octorara Intermediate, Greenwood Elementary, First State Montessori, East Bradford Elementary, East Goshen Elementary, Exton Elementary, Fern Hill Elementary, Hillsdale Elementary, Mary C Howse Elementary, Penn Wood Elementary, Starkweather Elementary, Westtown-Thornbury Elementary, Glen Acres Elementary, Avon Grove Charter School, Collegium Charter Academy, Downingtown STEM Academy, W.B. Saul H.S., Milton-Hershey School
- Launched new 4<sup>th</sup> grade program with field notebook for students and teacher lesson plans
- Webinars: Continued to present WikiWatershed.org series
- · Leaf Pack Network continues as a successful international stream monitoring program with over 400 groups
- Continued outreach initiatives on social media including the 'Science Education Video Features' highlighting current science and education at the Stroud Center
- Continued 'Stream School' for NJ Department of Environmental Protection in Advanced Macroinvertebrate Identification
- 5 businesses donated through the PA EITC tax credit program to support education for public school children

## SELECTED GRANT PROJECTS

- WPF WikiWatershed/MMW updates to user interface and new features.
- EPA EE Model grant "Greening STEM Technologies: A model for advancing DIY environmental sensing networks to support citizen science and primary and secondary education" continues. We have deployed **11** sensor stations, trained **25** teachers, and engaged **55** additional citizens in our 2-day training workshops in **4** U.S. states.
- NSF sub-award with Carnegie Mellon University 'Learning to See, Seeing to learn,' with macroinvertebrate taxa selection and training on www.macroinvertebrates.org website.
- Water Quality mobile app programmed for Android devices. Previously available for Apple devices.
- Created and piloted new Stream Fever lessons based on scientists NSF IOS Thermal grant work.
- New NOAA Chesapeake Bay B-WET grant "PA Environmental Literacy and MWEE Programming Capacity Building" awarded. Leading statewide Watershed Education Task Force to increase the number of high quality watershed education programs.

The Education Department was recognized as the Outstanding Environmental Education Program by the Pennsylvania Association of Environmental Educators in 2015. WikiWatershed Toolkit was awarded the 2017 Governor's Award for Excellence by PA

Department of Environmental Protection.

## **EUCATION PROGRAM FEEDBACK**

We loved coming to the Stroud Center and interacting with the educators and nature! There was a proper balance of lab learning and on-site/hands-on discovery. It is a great addition to our science curriculum. Nice job!!

R. Henry, teacher

I just wanted to let you know that we had an absolutely wonderful visit. Stroud is an amazing place with an extremely knowledgeable and caring staff. Thank you so much. We will be back!

D. Duggan, teacher, Octorara Intermediate School

Many students and teachers informed me that this was one of the best field trips that they have ever been on and I have to agree. I am delighted that we are continuing this partnership of teaching and learning. I was able to observe all the great stuff that you are doing for the environment. Your teachers today were very well prepared and went the extra mile to meet the needs of our diverse learning community.

M. Garvin, Assistant Principal, Avon Grove Intermediate School



We engage student groups such as this Brownie troop, in creating their own monitoring and conservation projects. The group in this picture planted and monitored over 100 trees, restoring a buffer at the Stroud Preserve.



We strive to create programs that leave a lasting legacy with students and teachers. We implemented a brand-new 4<sup>th</sup> grade program that includes a new field notebook for every student and activities matched to state academic standards.



Expanded Stroud Center science and restoration knowledge and teaching techniques training and professional development workshops.



Our summers are as busy as ever with youth learning about their local watersheds. Coatesville students discover on the 'Brandywine Trek' the beauty and importance of aquatic life through macroinvertebrate lessons.