



PENNSYLVANIA ASSOCIATION *of*
ENVIRONMENTAL EDUCATORS

2018 PAEE AWARD WINNERS

KEYSTONE AWARD:

This prestigious award recognizes an educator who has dedicated their life to advancing the quality and opportunity for environmental education in Pennsylvania. Recipients of this award should display uncommon and exceptional understanding, passion, and commitment to environmental education, and serve as an inspiration to other environmental educators.

Fran Bires – Retired

Fran was nominated by William F. Wasser, Park Manager for the Maurice K. Goddard State Park. Fran Bires has and continues to be a strong champion for the environment. Having dedicated more than 30 years of his life to environmental education and resources management, Fran has been an integral leader in catapulting environmental concepts and stewardship in Western Pennsylvania.

Fran earned his Undergraduate degree in Parks and Recreation at Penn State University in 1980. He continued his education at George Williams College in Chicago, attaining a Master's Degree in Environmental Education and Administration in 1982. Along his career path, Fran worked for Pennsylvania State Parks as a maintenance person at Raccoon Creek State Park and naturalist at McConnell's Mills State Park. Fran strengthened his distinguished resume by working as a Docent at the Carnegie Museum of Natural History and as Director of Resident Environmental Education Programs at Brooks Nature Center (Oglebay Park, Wheeling, WV). In the Spring of 1981 Fran became an Intern at McKeever Environmental Learning Center, initiating what would eventually transpire into a 35-year long career at the Center.

From 1983 to 1994, Fran worked as an Environmental Educator at McKeever. Later in 1994, he became Director of McKeever, eventually taking on the additional responsibility as Director of the Macoskey Center for Sustainable Education and Research at Slippery Rock University in 2012. Fran's grant writing skills permitted him to add a wind turbine, solar water heaters, and two well-designed retreat centers at McKeever ELC. Fran officially retired in 2016, but continues to be active in his passion for the environment and education by volunteering in the community.



When not volunteering, it's not uncommon at all to find Fran enjoying the outdoors kayaking, bicycling, or hiking. He is not as easy to find during the archery and trout fishing seasons.



Throughout his career, Fran has been an active member in several environmental education organizations including serving as membership coordinator and trainer for the Institute for Earth Education, Board Member and non-formal Environmental Education Certification Coordinator for the Pennsylvania Association of Environmental Educators (PAEE), and Board Member and Treasurer for the Friends of Goddard State Park at Maurice K. Goddard State Park.

Fran acted as host for the long-standing Sandy Creek Conservancy, as well as the Lake Wilhelm Watershed Committee. For the past three decades, he has trained many educators from various nations traveling as far as the Netherlands, the United Kingdom, and China and has brought to thousands of students strong values in stewardship and sustainability. He is the International Coordinator of Centers & Associates and the International Membership Coordinator for the Institute for Earth Education. For these and the many other unspoken contributions to environmental education made by Fran Bires, PAEE is honored to have selected him for the 2018 PAEE Keystone Award.

Fran lives in Sandy Lake with his wife Dr. Nancy Bires and their chocolate lab, Sierra.

OUTSTANDING ENVIRONMENTAL EDUCATION PROGRAM:

This award recognizes an exemplary or innovative environmental education program, which could serve as a model of excellence for educators throughout the Commonwealth of Pennsylvania.

The John James Audubon Center at Mill Grove

The John James Audubon Center at Mill Grove was nominated by Dr. Janet Samuels, Superintendent, for the Norristown Area School District. The mission of the John James Audubon Center at Mill Grove (JJAC) is to educate and inspire people to cherish and protect the natural world, by preserving Audubon's artistic, scientific, and historic legacy and celebrating the conservation movement he inspired while serving the mission of the National Audubon Society (NAS), "to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity."

The JJAC has made a commitment to the underserved community by providing conservation education throughout Norristown. This includes students from pre-K through 12th grade, after-

school programs, community resource centers, and city partnerships. Carrie Barron is the Assistant Director and Communications Manager.

John James Audubon Center (JJAC) has worked with all twelve schools in the Norristown Area School District during the past several years. Audubon Center educators work closely with their teachers and administrators to develop impactful programs that improve the students' learning.

Their programs enhance the Norristown School District's schools' curriculum by alignment to the State standards and cover watersheds, pollution, adaptations, ecosystems and the scientific method.

Norristown School District's appreciation of JJAC cannot be overstated because they provide unique hands-on learning programs that increase students' science and environmental knowledge; enhance critical thinking and problem-solving skills; provide a blend of in-class programs and field experiences for students that are multidisciplinary and inquiry based; and work closely with the teachers to provide them with curriculum and resources that can enhance their classroom teaching.

In addition, they have planted native plant gardens in all six of the elementary schools; creating an outdoor classroom for the students. Each 4th grader receives seven laboratory lessons that build upon scientific inquiry.



This past summer, they built a greenhouse at Norristown Area High School with solar panels and designed to collect rainwater. The greenhouse is now incorporated into Audubon's program serving their special needs students. In this learning space, students can grow native plants throughout the winter that can be used in the School District, as well as in the community.

Stony Creek, a tributary to the Schuylkill River that runs behind the high school is also part of the Audubon curriculum for their high school students. The water is monitored weekly and the data is shared on the GLOBE platform used by NASA and other government agencies to monitor water quality.


JOHN JAMES Audubon
CENTER AT MILL GROVE

JJAC programs continue to be an asset to Norristown School District's schools' curriculum at every level and PAEE wholeheartedly congratulates the Center at Mill Grove on receiving the 2018 PAEE Environmental Education Award.

OUTSTANDING ENVIRONMENTAL EDUCATOR

This award recognizes an educator who has made a significant impact and contribution to the environmental education field in a formal or non-formal setting through innovative or inspiring teaching practices.

Dr. Jerry Coleman - Assistant Professor of Biology, Montgomery County Community College

Dr. James Bretz, the Interim Dean of STEM at Montgomery County Community College nominated Dr. Jerry Coleman for the Outstanding Environmental Educator Award. Since 1999, Biology Associate Professor Jerry Coleman has been broadening the minds of students as well as the campus community at Montgomery County Community College by teaching them about the importance of caring for the environment and implementing sustainable practices.

In the classroom, he teaches Concepts of Biology, General Biology II, Environmental Biology and Ecology. Outside of class, he advises the student Environmental Sustainability Club, which participates in the annual Sustainability and Earth Day celebrations to increase awareness of and participation in environmentally friendly practices. Under his direction, the Club hosts guest speakers, such as environmental advocate, Emily Hunter and Delaware Riverkeeper, Maya K. van Rossum. He recently worked with students to complete a tree study of campus to determine the best locations for and types of trees to be planted as part of their annual tree-planting project.

Additionally, Jerry played an active role on the President's Climate Council, especially with implementing major sustainable practices across the College's campuses. These include a student shuttle bus, switching to energy efficient lighting and green office practices. Further, Jerry was involved in the development of a protected wetlands area on our Blue Bell campus, and he has helped plant more than 450 trees at the Montgomery County Community College's Blue Bell campus through a grant-funded initiative he leads.

In addition to his passion for teaching, his service with the College's Environmental Club and his ongoing sustainable efforts on our campuses, Jerry is deserving of the Outstanding Environmental Educator award for the holistic student experience he provides through a three-credit course, "Field Biology of West Virginia," a two-week intensive independent study course open to all students. Through this course, students experience nature and develop an understanding of the fragile ecosystem and what affects it. Several students changed their career paths as result of the course and many more became involved in environmental advocacy.



Said one student, “After this class, I am more aware of our precious planet. Going green isn’t a fad or a trend. It really is a way of life... I finally understood how much my actions mattered.”

The course evolved from Jerry’s predecessor, Professor Dick Andren, who took students on an independent study to Maine for 20 years. Jerry moved the location of the course to West Virginia, where he conducted his post-doctoral work, and where there is greater diversity of plant and wildlife. He knows several environmental experts, who speak with the students about such topics as coal mining restoration, endangered species and the effects of habitat fragmentation on biodiversity. During the trip, students camp, hike, raft and conduct research as a team.

In addition to expanding students’ understanding about the environment, the course has successfully aided students in transferring to schools such as Temple, SUNY, Delaware Valley and West Virginia University to complete their bachelor’s degree in biology or environmental science.

For Jerry, the study, now in its 18th year in West Virginia, is the highlight of his academic year. He looks forward to taking new students each year to help them continue their study of and interest in the environment, saying, “I am honored to be a part of something so important.”

Jerry holds a Bachelor of Science Degree in Biology from Haverford College and a Ph.D. in Botany from the University of Texas. He also taught science for the Peace Corps in Fiji. Over the years, Jerry has become our environmental expert on campus and is always willing to share his expertise with students and the community during events and activities as well as in the classroom. On behalf of PAEE, we congratulate Dr. Jerry Coleman for becoming the 2018 recipient of the PAEE Outstanding Environmental Educator Award.

DAISY S. KLINEDINST MEMORIAL AWARD

The award recognizes an educator with fewer than five years of experience who shows dedication to expanding their involvement with environmental education.

Tess Rubine – Environmental Science Teacher, Altoona Area High School

Tess Rubine was nominated by her colleague and Environmental Science Co-Teacher, Ms. Season Consiglio, from Altoona Area High School. Mrs. Rubine is the Environmental Science teacher at the Altoona Area High School. She has a teaching degree in Biology and has taken on all sections of the Environmental Science curriculum working with students who are from all different backgrounds, learning levels and socio-economic statuses. Many of these students are identified as special needs students who present with challenges. Mrs. Rubine has committed herself to



finding ways to overcome these challenges in order to provide a first rate education to all of her students regardless of their abilities.

She recognizes that Environmental Science will be the science that students will be most exposed to moving forward in their lives and she looks for new and innovative ways to teach the students the curriculum while also incorporating in ideas of how they can apply this knowledge in their everyday lives. Ms. Consiglio went on to say with enthusiasm, "I am fortunate to be able to co-teach with Mrs. Rubine and witness her enthusiasm for the environment on a daily basis as well as the high-level instruction she provides to her students."

Mrs. Rubine has made it her goal to educate all of her students about the environment and environmental concerns both locally and around the world and the importance of working towards sustainability for all people. She is committed to bettering her student's lives and the environment around them by exposing them to the most up to date research and events happening in environmental science along with career options within the field. Mrs. Rubine is always looking for ways to improve herself in order to provide a higher level of education and support to her students. In the past few years, she has attended multiple workshops on topics including urban agriculture, polar climate change, alternative wastewater management and hydroponics/aquaponics.

Following each training, she has returned to the classroom and found ways to incorporate these topics into the curriculum. Recent additions to the class include taking students on a trip to plant an urban neighborhood garden that benefitted the local neighborhood and a group of children who attended summer camp where the garden were planted.

Field trips were developed to take students to Penn State University for exposure to their Polar Day event where students learned about the use of drones and remote operated vehicles in climate change research. Students then returned to the classroom, researched, and built their own remote operated vehicles. The students also started small aquaponics gardens in the classroom growing plants with the help of the class pet beta fish.

The highlight of the class is a canoeing trip on the Juniata River to do water quality testing and to teach the students the principals of *Leave No Trace* when using public lands. Mrs. Rubine also enforces the basics of environmental education including the importance of recycling, waste management and being good stewards for the Earth. In the few years, Mrs. Rubine has been teaching she has truly tackled the curriculum and created a class in which students feel welcome and more importantly want to learn, which is a direct result of her passion for the environment and her desire to share that with her students.

Finally, Ms. Consiglio stated, "I am a co-teacher in Mrs. Rubine's classroom, so I work with her on a daily basis and see her total commitment to her students learning about the environment and the affects they are having on it. She truly is an amazing educator who is passing on her passion for the environment to the next generation of students." For these reasons mentioned above, PAEE and the family of Daisy S. Klinedinst are proud to present Tess Rubine with the PAEE 2018 Daisy S. Klinedinst Memorial Award.