## Sustainability Hero





September 2023

Erin Sharpe
Science Teacher and Green Team Advisor
Cedar Creek High School
Greater Egg Harbor Regional High School District (Atlantic County)

Erin Sharpe has over 18 years of teaching experience in New Jersey's public school system and is currently a science teacher at <u>Cedar Creek High School</u>, one of three high schools in the <u>Greater Egg Harbor Regional High School District</u>. In addition to teaching honors marine and wildlife management and biology, Erin runs the Cedar Creek Green Team and is the advisor to the Fishing Club. For 20 years, she has served as the leader of the <u>Atlantic County 4-H</u> and as the equine presentation coach for the <u>New Jersey 4-H</u>. Erin was one of four teachers selected nationally to participate in a deep-sea sediment coring research trip on the R/V Atlantis.

Erin's accomplishments in the classroom have not gone unnoticed. She was named the 2023-24 <u>Atlantic County Teacher of the Year</u> by the <u>New Jersey Department of Education</u>, and was the 2022-23 Cedar Creek High School Teacher of the Year. In the hallways of Cedar Creek High School, she is better known as the teacher with the dog (she fosters Seeing Eye puppies and brings them to school), the teacher that takes students on fun field trips, the teacher who is growing vegetables in the hallway, and the teacher hatching trout in her classroom.

As a lifelong lover of nature, science and animals, Erin has always wanted to be a teacher, and said she understands the importance of preparing the next generation for the challenges they will face. "I'm passionate about what I do, and I love to learn. When I commit to a project, I am all in," she explained. "I teach the students and try to model mindfulness. Basically, try to do your best and know that your small actions matter. Removing the lacrosse ball from our retention pond can be just as important as getting our school board to adopt a sustainability policy."

Erin's dedication and creativity have resulted in innovative learning experiences for her students. Under her leadership, Cedar Creek High School achieved <u>Sustainable Jersey for Schools</u> bronze-level certification in 2020, with 190 points, and in 2023, with 270 points; to see the school's sustainability accomplishments read the <u>2023 Cedar Creek High School Certification Report</u>. In addition, to support the school's sustainability projects, Erin applied for and received three Sustainable Jersey for Schools grants totaling \$14,000, that have helped fund sustainability curriculum, a green living wall and a STEM mobile lab.

**Cedar Creek High School Sustainability Internship Class:** Erin teaches an honors level course at Cedar Creek High School that focuses on environmental science and sustainability. Students apply for entry to the class and then complete a project that helps promote sustainability in the school and district. To choose a project, Erin has the students review the Sustainable Jersey for Schools certification actions.

In 2023, eight selected intern students worked on projects that included: policy work with the Board of Education; a school grounds biodiversity audit; preparation of the STEM mobile lab; planning for a school green living wall; an examination of

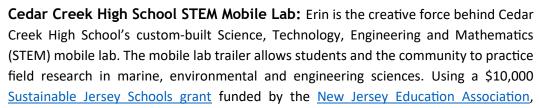
food insecurity in the district and expansion of the food pantry; documentation of equitable access to arts instruction; and creation of a tabletop fishpond.

"The sustainability internship class helps expand our school's sustainability efforts and our Sustainable Jersey for Schools

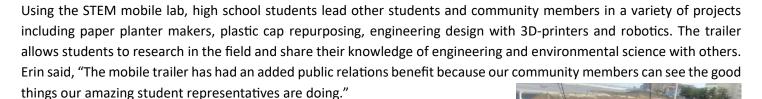
application by enlisting the help of students. It is a win-win because the students find it valuable to do an actual project to address an environmental challenge rather than just reading about the problems," Erin explained. "I encouraged the students to pick an area or an issue that they are passionate about."

A few of the student projects from the 2022-2023 school year were approved actions for the Cedar Creek High School Sustainable Jersey for Schools application. One student completed the documentation for the sustainability action: All Arts Disciplines Offered. And Cedar Creek High School senior Isabella Catalina worked with the Greater Egg Harbor Regional Board of Education to write and issue a resolution to create the Cedar Creek Green Schools Committee. Another student designed and built an above ground fishpond. The courtyard

fishpond will be used to teach various science curriculum concepts. It also adds beauty to the courtyard, contributing to positive mental health and wellness of the students who eat lunch there.



materials were purchased to make the lab trailer a movable classroom. Trailer stops have included the Atlantic County Utility Authority's Earth Day, the Mullica Township School District and Cedar Creek Varsity Day.



**Cedar Creek Anglers: Fishing Club:** Erin is the Cedar Creek Fishing Club Advisor. She said, "We're a school surrounded by rivers, back bays and the ocean down the street. I realized we should use our unique habitat to teach the students about marine environments, stewardship and responsible angling." Erin reached out to local angler clubs and community members, and partnered with the New Jersey Department of Environmental Protection Fish and Wildlife's <u>Hooked on Fishing-Not on Drugs Program</u>. The club members learn everything from knot

tying and hook choice, to fish cleaning and cooking. "I'm not an expert angler. I learn with my students from the guests I bring to club meetings. I work with students on how to fish, learn ocean stewardship, use a food source and have a positive life-long experience," Erin added. In addition, this year Erin set up a two-day boat safety course that helped 29 students prepare for the test to get a New Jersey Boating Safety Certificate.

**Inclusive Environment Professional Development and Assessments:** The Greater Egg Harbor Regional School District and Cedar Creek High School have continued to implement initiatives to create a sustainable positive school climate by completing actions identified through a school needs assessment. Erin said, "Our school has made a lot of progress with the inclusive culture actions. As teachers and staff, we receive professional development to learn ways to



create an inclusive environment in our school and classroom. I found it helpful to meet and talk openly with other teachers about our difficulties and our goals for supporting diversity."

Over the past two years, the district has focused on professional development of faculty and staff using the Creating Opportunities through Relationships (COR Model) which is designed to strengthen teacher-student relationships. All district administrators participated in over 10 hours of professional development related to bias in discipline, student mental health and the neurological impact of trauma on the brain. All faculty participated in Awareness and Cultural Bias training, as well as professional development and peer groups related to student trauma and its impact on behavior and learning. All faculty are working on certification in Mental Health First Aid, through a partnership with <a href="Spread the Love Foundation">Spread the Love Foundation</a>.

In January 2022, the Greater Egg Harbor School District partnered with AtlantiCare for a joint effort to expand health and wellness initiatives. The School Health Specialist staffs a Wellness Room which provides a stress-free environment to allow students to reset as needed throughout the school day. The staff have a separate Zen Den they can use for physical and mental health practices. The Cedar Creek High School received 30 Sustainable Jersey for Schools certification points for completing the School Culture and Climate Actions: <a href="Inclusive Environments Where All Can Thrive">Inclusive Environments Where All Can Thrive</a> and <a href="School Culture and School Sch

Climate Needs Assessment.

On-Board Educator with PUFINS at Sea: Erin was one of four teachers in the United States, and the only teacher from New Jersey, selected as an onboard educator with <u>PUFINS at Sea</u>. PUFINS stands for Paleo Unsaturated-alkenone Fluxes In Northwest Sediments. In 2022, Erin boarded the <u>R/V Atlantis</u> for a 14-day expedition with researchers and educators. The group went on a deep-sea sediment coring cruise off the coast of New Jersey and Nova Scotia.



The scientists hope to recover cores from the Holocene period (the last 12,000 years) to reconstruct sea-surface temperatures in the North Atlantic Ocean by examining the changes in alkenones recorded in the fossils found in the sediments. This data will allow researchers to address questions about the "Holocene Conundrum", an issue debated in the climate community, where cooling trends are observed in the North Atlantic during an otherwise warming world. The research study is a collaboration between the School of Oceanography at the University of Washington, the Department of Marine and Coastal Sciences at Rutgers University and the Rutgers University Geology Museum.

"As an onboard educator, I was tasked with making science more accessible to teachers," Erin said. "The PUFINS research team was busy analyzing samples and finding meaning in the mud, a process that was, and is, time consuming and takes many skilled hands. Many of us are used to immediate results, but science done well often takes time, discourse and

reflection. In the classroom, I plan to work with my students to analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems."

**More About Erin:** Erin has lived in New Jersey all her life. She developed a love for animals and the outdoors, growing up on a horse farm managed primarily by her grandmother and mother. Erin's horse Tigger has been with her for 25 years. She is



an only child, and was the first in her family to attend college. Erin earned a bachelor's degree in biology from the Richard Stockton College of New Jersey and a Master of Science degree in educational leadership from Rowan University. Her husband John is a retired high school and community college culinary arts teacher. They have a son named Joel who will be entering Cedar Creek High School this year and a German Shepherd named Galvin. The family enjoys camping and RV trips—they recently spent three weeks visiting the John Pennekamp Coral Reef State Park located in the Florida Keys.