The Institute Discovering Environmental Scientists (TIDES) 2021 Program

Prepared by Maija Niemisto

Fifteen high school and college students from communities across the Hudson Valley recently completed an innovative two week research program together with education staff and scientists at the Norrie Point Environmental Center. The students conducted environmental research projects along the banks of the Hudson River and in freshwater tidal wetlands examining the water quality, plant life, and fish biological diversity of the estuary. The Institute Discovering Environmental Scientists (TIDES) is a summer field research and laboratory science experience with DEC’s Hudson River National Estuarine Research Reserve, the Hudson River Estuary Program, the Cary Institute of Ecosystem Studies, and the Margaret A. Davidson Graduate Fellowship.

This was a very successful year of the program with many previous participants returning in mentorship roles and guiding newcomers with their projects. The students worked together to formulate scientific questions, gather field data, and conduct scientific analysis, and complete final research presentations on water-quality conditions, plant habitats, and fish diversity. Student exceeded expectations with very compelling presentations of their work to family and Hudson Valley community members.

Local public school teachers took part in TIDES to gain field science research experience to bring back to their home classrooms, while also serving in mentorship roles for students in this program. Guest scientists lead research seminars for the students throughout the program, introducing them to a wider world of environmental science monitoring and communication. Strong bonds were formed between our DEC Estuary Program staff, the Student Conservation Association interns, and the student research participants in TIDES, which will help serve these young people well on their future career paths.

Quotes from students about TIDES:

“Through TIDES I learned and refined my skills in data collection, data analysis, collaboration, and creating a scientific presentation.”

“I learned to take initiative and not be afraid to get dirty.”

“This program was honestly the best 2 weeks of my life and I’m so happy I got to experience it with everyone!”

“My favorite part was being with a group of people that made me feel a part of something great.”

“I learn how to create a science research project and information about plants, water, and fish life.”

“My favorite part of the experience was the teamwork aspect: meeting, working with, and learning from others.”