

KEEPING OUR COASTLINES CLEAN

A U.S. Virgin Islands
Marine Debris Curriculum





Clark Gully / Mangrove Lagoon, St. James, and Compass Point
Marine Reserves and Wildlife Sanctuaries

SOLUTIONS

Links to the Next Generation Science Standards, Quick Reference Guide

Curricula by Sub-Section		Middle School						High School					Sci & Engineering Practices
		ESS 3-1	ESS 3-2	ESS 3-3	ESS 3-4	ETS 1-1	ETS 1-2	ESS 3-1	ESS 3-3	ESS 3-4	ETS 1-1	ETS 1-2	
Composition & Abundance	Beach Box Exploration			✓									✓
	Investigating Oceanic Garbage Patches			✓					✓				✓
	A Degrading Experience			✓					✓				✓
Sources & Transportation	Watershed Walk	✓		✓				✓					✓
	Sources of Microplastics: Microbeads			✓									✓
Impacts	Entanglement Problems			✓	✓				✓	✓			✓
	Natural Disasters and Marine Debris		✓	✓	✓			✓					✓
Solutions	Linked Beach-Ghut Clean Ups	✓		✓					✓				✓
	Mitigating Microplastics			✓					✓				✓
	Upcycling Plastic Bags					✓	✓				✓	✓	
	Making Connections Through Art			✓					✓				✓

SPOT LIGHT

St. Croix Students Reduce Marine Debris Through SCUBA Diving

The AZ Academy, the St. Croix Educational Complex, and Cane Bay Dive Shop on St. Croix partnered with University of the Virgin Islands Masters of Marine & Environmental Science student, Carolyn Courtien, to train nine female high school students in open water SCUBA diving with funding from the NOAA Marine Debris Program.

The project was an extension of AZ Academy's After School Program, which regularly conducts beach cleanups, but felt that they were missing

marine debris in the water. The purpose of the "Diving for Debris" Community Transfer Project was to empower these students to take action to reduce underwater marine debris and to inspire them to educate their community, including other middle school students, about the sources of and solutions to marine debris. During the Spring of 2017, these nine students completed a 13-week SCUBA training program, which included lectures on marine conservation concepts, and the planning and execution of two public underwater cleanups at Divi Carina Bay and the Frederiksted Pier. These cleanups yielded a great deal of debris not usually seen in their beach cleanups. As part of the project, students were also able to tour the NOAA research vessel Nancy Foster, while docked at the Frederiksted Pier during the Coral Reef Ecosystems Research cruise in 2017. This program was unique, in that it provided specialized training to students that connected them with and provided the tools to clean up their local marine environment, and increased their exposure to careers working in the field of marine science.



Five students from the Diving for Debris Program preparing to collect marine debris under the Frederiksted Pier on St. Croix (Photo credit: Carolyn Courtien).