

# Hurricanes reveal shipwreck secrets



Archaeologist Ruud Stelten (far left) with his team of research shipwreck divers.

ST. EUSTATIUS--Young scientists visiting St. Eustatius believe that major hurricanes today can tell about hurricanes that swept across the Caribbean more than 300 years ago.

The scientists are convinced that Hurricanes Irma and Maria disturbed the sites of two shipwrecks. Details of a treasure hunt by the scientists and several artefacts were recently presented to the Caribbean Netherlands Science Institute (CNSI) Science Café.

A survey research team of 11 science students from Canada and the United States of America (USA) have been diving over the

last 12 weeks to explore a marine site on the south-eastern side of the island. Leader of the team was Dutch archaeologist Ruud Stelten of Terramar Museum in Bonaire.

Although further scientific work will be necessary, their conclusions about the site are revealing. "We think one shipwreck dates from the mid-18<sup>th</sup> century," Allison Day said. "Her cargo was probably perishable, since we discovered many tell-tale barrel hoops. She also carried a large ballast of yellow Dutch bricks.

"No shipwreck treasure was found, no chests of silver - most of the artefacts

were used by the crew and certainly nothing was found from the late 18<sup>th</sup> century. A hurricane was the clear suspect for the wooden vessel sinking. With no reefs in the area and certainly no historical naval battles, she probably came to rest through violent hurricane conditions."

A second research diver, Rebekah Mills from Columbia University, explained the careful and systematic work required by marine archaeology. "Our fieldwork involves a lengthy process of tagging, documentation, photography, measuring and recovery. The next step is

conservation and involves laboratory work. Marine artefacts are often fragile and encrusted with marine life and calcium carbonate. They have to be documented, analysed, cleaned and stabilised," Mills said.

She explained that objects found at the site were super-salty and required various treatments with vinegar. "Artefacts were generally Dutch pipes and pottery. However, with-

out pieces of the vessel, it would be difficult to suppose her nationality."

Stelten is planning a public exhibition to display the team's findings at CNSI within the next few months. "Meanwhile our fieldwork has not stopped. Hurricane Irma has revealed a lot of secrets and we intend to carry out our detective work further to answer so many questions about these shipwreck mysteries."

