

Scientists learn from Guana

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By SUSANNA HENIGHAN

The BVI advertises its beautiful empty beaches, but a group of scientists knows better.

The researchers, who have been studying Guana Island as part of the annual Marine Science Programme there, are spending their summer documenting the types of micro-invertebrates living in the sand and water of Guana Island.

And they have been finding a lot.

The scientists, Todd Zimmerman and Don Cadien, were among those researchers discussing their findings at a marine biology symposium at H. Lavity Stoutt Community College last week.

Zimmerman said they have found many species of invertebrates that have never been discovered before and others that are identified, but little is known about.

The scientists' chief aim this summer is to document all the invertebrates they find, organise them and log them on their web site, where students and other scientists can go to research what is known about the different species. Along with the name and species information about their finds, the website includes colourful close-up pictures that will help other scientists visualise the species.

Cadien said that the project has been finding so many new species simply because many people overlook the tiny invertebrates. "We're finding lots of new species

because we're looking," he said.

Invertebrates are tiny animals that live in the sand and water of the ocean. While they are known by common names like sea slugs, scuds and pillbugs, there are actually thousands of species and varieties, each with their own characteristics.

Some are visible with the naked eye and others are not.

For food, these animals eat small organisms, like worms. Others lick individual grains of sand looking for tiny amounts of food. Others feed off the skin and blood of humans and other animals they find in the sea.

While invertebrates can be hard to see, they are not hard to find if you know what you're doing.

"If you put a light bulb in the water at night, you'll have a vast number of these critters immediately," Cadien said.

While they are small, the invertebrates have evolved into sophisticated species, with their own complex reproductive rituals. Cadien described one species where males keep a harem of females for reproduction. The male must be vigilant, however, because there are two other kinds of males also, one that looks like a female and one that looks like a juvenile. These other males will try to infiltrate a harem and steal the females, Cadien said.

In another species, the males go on what scientists call "nuptial swims" at night looking for a mate.

The work Cadien and Zimmerman is doing is just part of the scientific research being completed this summer at Guana

Island.

Four other scientists are also working there, investigating topics including flamingos, salt ponds, sea grasses and reef fish.

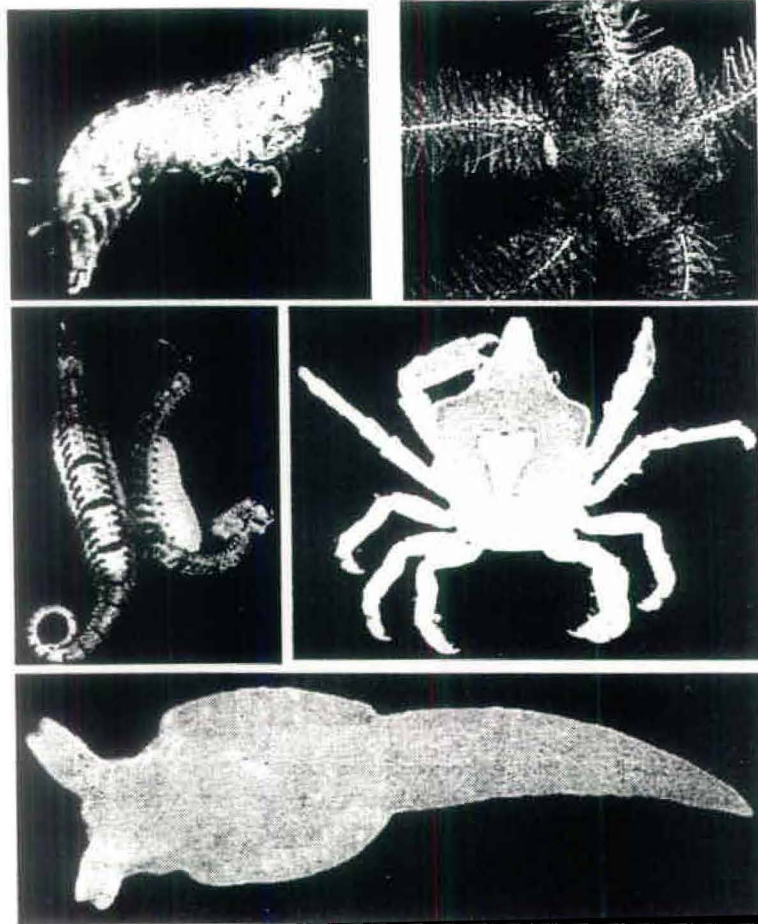
This is the 10th year that Guana Island has opened its doors to scientists in the summer for the Marine Science Programme. The programme is supported by Henry and Gloria Jarecki.

There is something extra special about this year's programme: four students from HLSCC are working alongside the scientists on fellowships to support the research and to complete their own projects.

The four students, Aasha Flax, Denis Jones, Kirsten Lettsome and Shanie Dasrath, are being supported by three grants from the National Science Foundation and the L.A. County Museum. A fourth grant was given by the Environmental Health Department to support Dasrath, who is researching natural ways to combat mosquito breeding.

The students are gaining valuable scientific experience by working alongside the scientists said their teacher, Lianna Jarecki who is also conducting research on Guana Island this summer.

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• These are some of the types of marine invertebrates researched this summer by scientists at Guana Island. The project involves documenting the different species, many of which have never been discovered before. Other scientists are working on projects about sea grass, flamingos, salt ponds and reef fish.
