

# **OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES**

## TOPIC - Stony Coral Tissue Loss Disease (SCTLD) in the Caribbean FEATURED EXPERT - Dr. Valeria Pizarro of Perry Institute for Marine Science

#### **RELATED LEARNING STANDARDS**

OCEAN LITERACY PRINCIPLES - <u>Principle #5</u>: The ocean supports a great diversity of life and ecosystems. <u>Principle #6</u>: The ocean and humans are inextricably interconnected.

#### **NEXT GENERATION SUNSHINE STATE STANDARDS -**

- **SC.4.L.17.4:** Recognize ways plants and animals, including humans, can impact the environment.
- SC.5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.
  SC.6.N.1.5: Recognize that science involves creativity, not just in designing experiments, but also in creating
- explanations that fit evidence.
- **SC.7.N.1.5:** Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.
- **SC.7.L.17.3:** Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.
- **SC.8.N.4.2:** Explain how political, social, and economic concerns can affect science, and vice versa.
- **SC.912.N.1.1:** Define a problem based on a specific body of knowledge; pose questions, conduct systematic observations, examine books and other sources of information to see what is already known...
- **SC.912.L.17.4:** Describe changes in ecosystems resulting from seasonal variations, climate change and succession.
- **SC.912.L.17.8:** Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.
- **SC.912.L.17.17:** Assess the effectiveness of innovative methods of protecting the environment.

### SUPPLEMENTAL RESOURCES

- o Reading ANGARI Foundation Meet Valeria Pizarro (Grades 5-12)
- Resource Library Perry Institute for Marine Science Stony Coral Tissue Loss Disease (Grades 6-12)
- Resource Library MPAConnect <u>Stony Coral Tissue Loss Disease</u> (Grades 6-12)
- Resource Library AGRRA <u>Coral Disease Outbreak</u> (Grades 6-12)
- Resource Library NOAA FKNMS Florida's Coral Reef Disease Outbreak: Disease (Grades 4-12)
- o Video Short ANGARI Foundation & PIMS Stony Coral Tissue Loss Disease in The Bahamas (Grades 4-12)
- Reading Frontiers for Young Minds How Can Studying Mucus Protect Coral Reefs? (Grades 4-10)
- Reading NOAA National Ocean Service <u>Coral Diseases</u> (Grades 7-12)
- Reading NOAA NMS NOAA & partners combat devastating coral disease & plan for restoration (Grades 6-12)
- Reading FL DEP Intervention & fate tracking for corals affected by SCTLD in N. FL Reef Tract (Grades 10-12)
- o Lessons Southeast Florida Coral Reef Initiative Florida's Coral Reef Lessons and Activities (Grades K-12)
- Lesson California State University, Northridge <u>A Lesson Plan in Coral Reef Ecology</u> (Grades 9-12)
- Publication Frontiers for Young Minds ... Underwater Pandemic is Wiping Out Caribbean Corals (Grades 5-10)
- Publication Frontiers in Marine Science <u>Spatial and Temporal Patterns of Stony Coral Tissue Loss Disease</u> <u>Outbreaks in The Bahamas</u> (Grades 10-12)
- Publication Frontiers in Marine Science <u>The Emergence and Initial Impact of Stony Coral Tissue Loss</u> <u>Disease (SCTLD) in the United States Virgin Islands</u> (Grades 10-12)