

OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES

TOPIC - Florida Horseshoe Crab Watch FEATURED EXPERT - Dr. Savanna Barry of University of Florida IFAS Extension & Florida Sea Grant

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.1-4.N.1.1:** Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information, conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those...
- **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 Citizen Science UF/IFAS <u>Florida Horseshoe Crab Watch</u> & FWC <u>Florida Horseshoe Crab Watch–Linked w/Limulus</u>
- o 3D Model GéoLab UniLaSalle Limulus polyphemus (Grades K-12)
- Infographic Squidtoons <u>Anatomy of the Horseshoe Crab</u> (Grades 4-12)
- o Video Short NOAA Sanctuaries Horseshoe Crabs of FL Keys National Marine Sanctuary (Grades 6-12)
- Video Shorts NOAA Ocean Today Every Full Moon <u>The Remarkable Horseshoe Crab</u> (Grades K-10)
- Video Real Science <u>Why Horseshoe Crab Blood Is So Valuable</u> (Grades 7-12)
- Reading & Lesson NC Sea Grant Coastwatch Classroom <u>Blood Draw at the Horseshoe Corral</u> (Grade 6-8)
- Lesson PBS LearningMedia & The WNET Group Endangered Relationships (Grades 3-8)
- Lesson PBS LearningMedia & Schoolyard Films <u>Horseshoe Crabs: Prehistoric Paramedics</u> (Grades 3-12)
- Lesson NOAA National Estuarine Research Reserve System <u>Hooray for Horseshoe Crabs</u> (Grades 6-12)
- o Lesson PBS LearningMedia Rendezvous With Horseshoe Crabs (Grades 6-12)
- Resource Library Cornell Cooperative Extension Digital Education <u>The Horseshoe Crab</u> (Grades K-12)
- Resource Library Partnership for the Delaware Estuary <u>Horseshoe Crab Resources</u> (Grades K-12)
- Resource Library Sacred Heart University <u>Project Limulus</u> and associated <u>lesson</u> (Grades K-12)
- Resource Library PBS Nature Crash: A Tale of Two Species Documentary & Teacher's Guide (Grades 6-12)
- Reading & Resources Science Journal for Kids and Teens <u>What can fossils tells us about the nervous system's</u> <u>evolution?</u> (Grades 6-10)

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