

OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES

TOPIC – ***Establishing & Managing Marine Protected Areas***

FEATURED EXPERT – ***Lindy Clyde Knowles***

RELATED LEARNING STANDARDS

OCEAN LITERACY PRINCIPLES - [Principle #5](#): The ocean supports a great diversity of life and ecosystems.

[Principle #6](#): 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.6.N.2.3:** Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goods.
- 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.7.N.1.5:** Describe the methods used in the pursuit of a scientific explanation as seen in different fields...
- SC.8.N.4.1:** Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.
- 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 & 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.
- SC.912.L.17.18:** Describe how human population size and resource use relate to environmental quality.
- SC.912.L.17.20:** Predict the impact of individuals on environmental systems and examine how human lifestyles...

SUPPLEMENTAL RESOURCES

- Reading – ANGARI Foundation [Meet The Scientist: Lindy Knowles](#) (Grades 6-12)
- Reading – Rotary [Why Rotary is committed to mangroves](#) (Grades 6-12)
- Reading – The Nature Conservancy [Marine Managed Areas in The Bahamas](#) (Grades 8-12)
- Reading – Frontiers for Young Minds [Our Blue Planet: Connecting Humans and the Ocean](#) (Grades 5-9)
- Reading – Frontiers for Young Minds [Marine Protected Areas: A Way to Protect Our Oceans](#) (Grades 6-12)
- Reading – National Geographic [The Importance of Marine Protected Areas \(MPAs\)](#) (Grades 9-12)
- Reading – AAAS Science & Diplomacy [Marine Protected Area Diplomacy with the Caribbean](#) (Grades 8-12)
- Resource Library – USDOC/NOAA/USDOJ [National Marine Protected Areas Center](#) (Grades 6-12)
- Resource Library – NOAA National Marine Sanctuaries [Marine Protected Areas](#) (Grades 8-12)
- Resource Library – Marine Protected Area Collaborative Network [Kids Education](#) (Grades K-9)
- Lesson – National Geographic [Marine Ecology, Human Impacts, & Conservation](#) (Grades 6-12)
- Lesson – National Geographic [Marine Protected Areas Exploration](#) (Grades 9-12)
- Lesson – NOAA National Marine Sanctuaries [Exploring National Marine Sanctuaries](#) (Grades 5-12)
- Lesson – NOAA CORIS [Marine Protected Areas Lesson Plan – Protect This!](#) (Grades 9-12)
- Lesson – NOAA OE&R [From Pulley Ridge to the Florida Keys Expedition | Everyone Wins!](#) (Grades 9-12)
- Curriculum – California Marine Protected Areas [MPA Toolkit Unit 1](#) (Grades K-2)
- Curriculum – Santa Barbara Channelkeeper Seafari – [Marine Conservation Education](#) (Grades 4-6)
- Curriculum – WILDCOAST [Marine Protected Area \(MPA\) Lesson Plans](#) (Grades 6-8)
- Curriculum – Carleton College SERC | InTeGrate [Oceans in Protection: Marine Protected Areas](#) (Grades 8-12)