

OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES

TOPIC – *Florida's Goliath Grouper*

FEATURED EXPERT – *Dr. Robert Ellis of Fish and Wildlife Research Institute,
Florida Fish and Wildlife Conservation Commission*

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.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...
- 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.1.6:** Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions...
- 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.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.12.1:** Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.
- 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.

SUPPLEMENTAL RESOURCES

- o Resource Library – Florida Fish and Wildlife Conservation Commission [Goliath Grouper](#) (Grades 7-12)
- o Resource Library – NOAA Fisheries [Species Directory: Atlantic Goliath Grouper](#) (Grades 7-12)
- o Reading – Florida Museum of Natural History [Discover Fishes: Epinephelus itajara/Goliath Grouper](#) (Grades 7-12)
- o Reading – ANGARI Foundation [#ANGARIDeepDive - Goliath Grouper \(Epinephelus itajara\)](#) (Grades 6-12)
- o Video Short & Study Guide – Jonathan Bird's Blue World [Webisode #48 | Goliath Grouper!](#) (Grades K-12)
- o Video Short – Nat Geo Kids [Finding the Giant Goliath Grouper | What Sam Sees](#) (Grades K-12)
- o Video Short – NOAA Ocean Today [Gentle Giants: Goliath Grouper](#) (Grades 3-12)
- o Video Short – Deep Marine Scenes [Facts: The Goliath Grouper](#) (Grades 4-12)
- o Lesson Plan – California Academy of Sciences [Sustainable Fishing](#) (Grades 3-8)
- o Lesson Plan - EarthEcho International [What's the Stake?: A Lesson on Fisheries Management](#) (Grades 6-9)
- o Reading – Florida Atlantic Univ. [Boom! Detecting Gregarious Goliath Groupers Using Their Sounds](#) (Grades 7-12)
- o Reading – Ellis, RD, CC Koenig, JV Locascio, CR Malinowski, and FC Coleman (2023). [Spawning Migrations of the Atlantic Goliath Grouper along the Florida Atlantic Coast](#). Fishes 8(8). (Grades 8-12)
- o Reading – Koenig, CC, FC Coleman FC, and CR Malinowski (2020). [Atlantic Goliath Grouper of Florida: To Fish or Not to Fish](#). Fisheries 45(1). (Grades 9-12)
- o Reading – Koenig, CC, FC Coleman, and K Kingon (2011). [Pattern of Recovery of the Goliath Grouper Epinephelus itajara Population in the Southeastern US](#). Bulletin of Marine Science 87(4). (Grades 8-12)