



OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES

TOPIC - Billfish Conservation FEATURED EXPERT - Peter Chaibongsai of The Billfish Foundation

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.N.1.3: Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.

SC.4.L.17.4: Recognize ways plants and animals, including humans, can impact the environment.

SC.7.N.1.3: Distinguish between an experiment and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.

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.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.

SC.912.L.17.20: Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.

SUPPLEMENTAL RESOURCES

- o Infographic PBS All About Billfish: A Practical Guide to Predatory Fish (Grades 2-12)
- o Resource Library The Billfish Foundation Kid's Corner | Sailfish & Spearfish Magazines (Grades K-12)
- o Video Short Animal Fact Files Marlin Facts: Also Swordfish Facts (Grades K-12)
- o Video Short BBC Earth Planet Earth | Sailfish are Master Hunters (Grades K-12)
- o Video Short BlueWorldTV Jonathan Bird's Blue World | Sailfish! (Grades K-12)
- o Video Short The Billfish Foundation Who We Are (Grades 4-12)
- o Documentary South Florida PBS ChangingSeasTV | Billfish: Battle on the Line? (Middle-High School)
- Video Short The Billfish Foundation 5 Ways to Increase Post-Release Survival of Billfish (Grades 4-12)
- Lesson NOAA National Marine Sanctuaries Game of Life (Grades 6-8)
- Resource Library PBS Marine Fisheries & Aquaculture Series | For Educators (Middle-High School)
- o Resource Library Carleton College SERC EarthLabs | Fisheries Unit (Middle-High School)
- o Reference NOAA Fisheries Recreational Fishing & Recreational Fishing Data (Middle-High School)
- o Readings The Billfish Foundation Research News and Reports (Highschool)
- o Readings The International Game Fish Association Caribbean Billfish Project (Highschool)
- Reference Monterey Bay Aquarium <u>Seafood Watch</u> (Middle-High School)