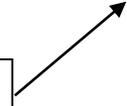


Selecting the Ocean 180 Champ

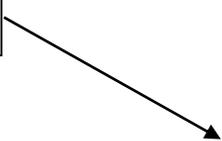
Title



Picture



Summary



Scientists are challenged to bring their latest research to life in a short video. The videos will be first judged by a group of scientists and communication experts. They will select the top 10. Then final winners will be selected by potential future ocean scientists – 6th-8th grade Middle Schoolers – from classrooms around the world. Me included.

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Crab Swarm



A seamount off the coast of Panama is an ecological hotspot. During a trip to Hannibal in 2015, scientist in a sub found a cloud of sediment on the seafloor near the bottom of the seamount with hundreds of objects moving around inside. The objects turned out to be red crabs.

Rating: 2 Points

Coral Reef Rescue



The scientist counted the parrotfishes, corals, seaweeds, and other organisms on the reef across the Caribbean. Their focus was overfishing. Surprisingly, there were just as many seaweeds on overfished reefs as on protected reefs, but sponges on overfished reefs were 3 times more likely to overgrow and kill corals

Rating: 3 Points

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Diet Secrets



Research by the Monterey Bay Aquarium Research Institute scientists analyzed 27-years of video collected by deep-diving, submersibles. Their results show a food web that is far more complex than previously known. The Web showed a variety of jellies, squids, fishes, worms, and crustaceans feeding on one another to sustain life in the deep sea.

Rating: 4 Points

Shark Conservation



People in auto dealerships were surveyed and asked for their knowledge of sharks, where they got their information, and if the individuals supported shark conservation. They were also asked about their age, education level, etc. The results indicate that the more knowledge a person has the more likely they are to support shark conservation.

Rating: 2 Points

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Drifting in the Gulf



Drifters are buoys with instruments that float at the surface of the ocean and send their location data to satellites as they drift with the currents to provide scientists with information about how water moves. Scientists at the University of Miami spent two years testing various structures and materials before finalizing the new CARTHE drifter design, which is the first environmentally friendly drifter made from 85 percent seawater biodegradable components.

Rating: 4 Points

Goliath Grouper



Atlantic Goliath Grouper are known to grow to sizes exceeding 8 feet and 800 pounds. Due to their large size they are easy to catch. The species was listed as critically endangered and in 1990 fishing for them was banned. The study gives information about the presence, abundance, and size distribution of Atlantic Goliath Grouper within the central eastern Gulf of Mexico thereby providing valuable baseline data.

Rating: 4 Points

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Palmyra Reef Shark



Our research was to determine how well ocean parks protect sharks. We did this research due to shark finning and overfishing. We attached small GPS trackers to the dorsal fins of a shark species called a Grey Reef Shark to follow their movements. These sharks were tagged within a large US-owned protected area in the Pacific that is twice the size of Massachusetts.

Rating: 3 Points

Spread the Word Not Halophila



Caribbean seagrass communities provide juvenile fish areas to forage for food, protection and, nursery habitat. Starting in 2002, an invasive seagrass *Halophila stipulacea* colonized many Caribbean islands displacing native seagrass. The impacts to juvenile fish that utilize seagrass communities remains under studied.

Rating: 2 Points

Selecting the Ocean 180 Champ

Soundscapes of Florida Bay



Marine scientists have begun to recognize that the soundscapes of marine habitats indicate the health and functioning of ecosystems. In our study, we recorded and analyzed the soundscapes of the three dominant habitats of Florida Bay. Our restoration areas sounded similar to healthy areas, meaning our efforts to restore degraded hard-bottom help those soundscapes to recover as well.

Rating: 3 Points

Where Do Sharks Go?



In order to investigate where bull, great hammerhead and tiger sharks spend the majority of their time, we satellite tagged 86 of them in waters off south Florida and the Bahamas. We used the movement data from these tags to explore whether these highly mobile shark species might benefit from spatial protection, such as marine protected areas (MPAs).

Rating: 4 Points

Selecting the Ocean 180 Champ

My Choices

1. Drifting in the Gulf
2. Where do Sharks Go ?
3. Goliath Grouper