

Episode 201

“No Fish Left Uncounted”

A team of research divers counts the fish in Dry Tortugas National Park, to measure if marine protected areas are helping the regional ecosystem rebound from years of overfishing and environmental change.

Episode 202

“Sentinels of the Seas”

Dolphins are a Florida icon – but their charismatic smile belies the silent threats lurking in their ocean home. Many of the animals are showing disturbing signs of immune system dysfunction and disease, which may be linked to contaminant exposure.

Episode 203

“Seagrasses and Mangroves”

Seagrasses and mangroves may not receive as much attention as coral reefs – but, they, too, play an important role in the ocean’s web of life. Today both are in decline globally, threatening an ecosystem collapse from the bottom of the food chain all the way to the top.

Episode 204

“Sinking the Vandenberg”

Off Key West, in the Florida Keys National Marine Sanctuary, lies the world’s second largest intentionally sunk shipwreck, the USNS General Hoyt S. Vandenberg. This artificial reef is now attracting fish, fishermen and divers.

ALIEN INVADERS –301

In the waters of the western Atlantic and Caribbean, a voracious alien predator has taken hold. Native to the Indo-Pacific, the invasive lionfish is a major threat to biodiversity and the health of already stressed coral reef ecosystems.

REEF REVIVAL –302

In the emerging science of coral reef restoration, marine biologists and resource managers are discovering naturally occurring mechanisms that promote coral growth and restore ecological balance in these gardens of the sea.

PRESCRIPTION: OCEANS –303

The oceans are part of America's newest medical frontier. In Florida, scientists are testing sea sponges for their potential anti-cancer properties. These and other marine invertebrates may hold the key to unlocking the secrets of our own biology.

AFTER THE SPILL – 304

Last year's catastrophic oil spill in the Gulf of Mexico may no longer make headline news, but the story is far from over. Oceanographers continue to study the longterm effects this disaster might have on marine ecosystems.

Episode Descriptions Season 4

Episode 401:

Tracking Tigers

Tiger sharks are the ultimate apex predators. They can travel long distances, utilizing a variety of habitats. Scientists use satellite tags and DNA forensic tools to better understand the migrations of this magnificent species and investigate the impacts of the world shark fin trade.

Episode 402:

Mysterious Microbes

On coral reefs, microorganisms are copious creatures. Throughout Florida, scientists painstakingly work to identify key players within this microbial community and directly link a devastating coral disease to a human pathogen.

Episode 403:

Grouper Moon

During the winter full moons Nassau Grouper gather in large numbers to spawn. Most of the known spawning sites have been fished out, but the Cayman Islands are home to the last great reproductive population of this endangered species.

Episode 404:

Coastal Carnivores

Scientists studying the coastal Everglades have made some perplexing discoveries. Bull sharks are living upstream where alligators should thrive, and gators are swimming out to the ocean to feed.

CS # 501: "Coral Hybrids"

While Elkhorn and Staghorn corals have undergone a drastic decline in the Caribbean, their hybrid, "Fused Staghorn," is increasing in numbers in parts of the region. One scientist is studying the animals in Belize to see if the hybrid might be better equipped to deal with environmental stressors than its parents.

CS # 502: "Sunken Stories"

In the Florida Keys, divers from around the country learn how to map shipwrecks and apply their skills on a mysterious 19th Century slave ship. When diving isn't possible, professional explorers use high-tech tools to scan objects buried beneath the seafloor.

CS # 503: "Creatures of the Deep"

In the cold, deep waters of the Gulf of Mexico, little-known animals spend their entire lives far removed from our human world. Until now, little research has been conducted on these creatures of the deep, keeping much of their lives a mystery.

CS # 504: "Reefs of Rangiroa" a co-production with the Khaled bin Sultan Living Oceans Foundation

Scientists with the Global Reef Expedition are on a six year mission to study remote coral reefs around the world. While in French Polynesia, the experts conduct extensive habitat mapping to create one of a kind seafloor atlases. Scientists also assess the health of the reefs to compare and contrast the resilience of reef systems over a large geographical area.

Episode Descriptions Season 6

601: Living Fossils

In the deep, dark waters off the coast of Roatan, Honduras, strange flowerlike animals flourish. These sea lilies and feather stars, known as Crinoids, have been around in various forms since before the age of Dinosaurs. Now experts descend into the deep to study the animals from a submersible.

602: Biggest Fish in the Sea

Each summer, the world's largest known aggregation of whale sharks occurs just off the coast of Cancun, Mexico, attracting tourists and scientists alike. Hundreds of these gentle giants come to the area to feed on plankton, giving experts the opportunity to learn more about the largest fish in the sea.

603: Galápagos: Windows into the Future

a co-production with the Khaled bin Sultan Living Oceans Foundation

The unique oceanic conditions of the Galápagos Islands serve as a perfect natural laboratory to study how climate change may impact corals in the future. Scientists spend a month in the archipelago to conduct research as part of the Global Reef Expedition.

604: Saving Sawfish

The strange, prehistoric-looking Smalltooth Sawfish were once coveted by anglers as popular trophy fish. But habitat loss and overfishing have greatly reduced the animals' range and landed them on the endangered species list. Today, the fish are limited to South Florida, where scientists are conducting research to save the species.

Episode Descriptions Season 7

Episode # 701

Sea Turtles: The Lost Years

After sea turtle hatchlings emerge from their nests, they vanish into the sea. Until recently, their journey was largely shrouded in mystery. Now, as technology advances, researchers are beginning to understand where turtles go during their so-called “lost years.”

Episode # 702

Grand Cayman’s Famous Stingrays

Each year, thousands of tourists interact with the tame southern stingrays that congregate in the shallow waters of Grand Cayman’s North Sound. Famous marine artist and scientist Dr. Guy Harvey has assembled a research team to study what impact the ecotourism might have on the wild fish.

Episode # 703

Billfish: Battle on the Line?

The unique oceanographic conditions of the eastern tropical Pacific make the area one of the best spots in the world for big game anglers to hook billfish. But intense pressures from commercial fishing operations have taken their toll on the numbers of sailfish and marlin in the region. Researchers are studying the animals to provide the data necessary to protect the fish populations from further decline.

Episode # 704

The Secret Sex Life of Fish

Most people are familiar with the pretty tropical fish found in aquariums, but few realize that some of these animals are capable of changing sex. Discover the unique ways of how some fish species do this and why they likely evolved this way.

Episode Descriptions Season 8

801

Sponges: Oldest Creatures in the Sea?

Until recently there was scientific consensus that sponges were the first animals to branch off the “Animal Tree of Life,” a kind of family tree for all living and extinct animals on earth. But recent DNA research has cast doubt on that theory, with some scientists suggesting that ctenophores, also known as comb jellies, are an older lineage.

802

Manatees: Conserving a Marine Mammal

Every winter, hundreds of manatees aggregate at Crystal River, Florida, attracted by the warmer, spring-fed clear waters. This sanctuary is also a treasure for scientists, who take advantage of these manatee gatherings to study them. From decades of visual ID studies to the most cutting-edge DNA research, experts hope that science will help conserve this beloved marine mammal.

803

Maug’s Caldera: A Natural Laboratory a co-production with Open Boat Films

In the remote Pacific, the islands of Maug rise out of the sea. Formed by an ancient volcano, shallow hydrothermal vents are found close to coral reefs inside the submerged caldera. These vents emit levels of CO₂ that can be expected in the world’s oceans by the end of the century, making these waters a natural laboratory for scientists studying the impacts of ocean acidification on coral reefs.

#804

Beneath the Bridge

The Blue Heron Bridge in Riviera Beach, Florida, is known as one of the best shore dives in the United States. What appears as an unlikely dive site at first is home to a rich variety of marine life, ranging from tiny nudibranchs to manta rays. Underwater photographers are documenting what lives beneath the bridge, and a scientist is studying how two species of octopus co-exist there.