Changing Seas on WXEL 4th Quarter 2023

10/02/23 17:30 PM CHANGING SEAS #1401

VANISHING WHALES

The humpback whale population that migrates between Hawai i and Alaska is considered a conservation success story. When sightings of the animals suddenly dropped, people became concerned. Scientists in both locations are trying to understand what happened to the whales and why.

10/03/23 17:30 PM CHANGING SEAS #303

PRESCRIPTION: OCEANS

The oceans are part of America's newest medical frontier. In Florida, scientists are studying a variety of marine invertebrates which may hold the key to unlocking the secrets of our own biology.

10/09/23 17:30 PM CHANGING SEAS #1402

HUMPBACK HEALTH

How does the body size and overall health of humpback whales change across their migratory cycle? A team of researchers studying the animals, which spend part of the year feeding in Alaska and a few months fasting while in their Hawaiian breeding grounds, is making remarkable discoveries.

10/10/23 17:30 PM CHANGING SEAS #304

AFTER THE SPILL

The catastrophic oil spill in the Gulf of Mexico in April 2010 may no longer make headline news, but the story is far from over. Oceanographers continue to study the long-term effects this disaster might have on marine ecosystems.

10/16/23 17:30 PM CHANGING SEAS #1403

KELP: HIDDEN TREASURE OF THE SALISH SEA

The kelp forests of the Puget Sound have long played an essential role in the local ecosystem as a habitat and food source. Today, this foundational species is in decline, but resource managers, scientists, tribal citizens, and advocates are working together to solve the mysteries of conserving and restoring kelp forests.

10/17/23 17:30 PM CHANGING SEAS #401

TRACKING TIGERS

Tiger sharks are the ultimate apex predator. Scientists use satellite tags and DNA forensic tools to better understand the migrations of this magnificent species and to investigate the impacts of the world shark fin trade.

10/23/23 17:30 PM CHANGING SEAS #1404

SAVING FLORIDA'S STARVING MANATEES

Florida's iconic sea cows are dying in record numbers. Years of declining seagrass beds have eliminated one of the gentle giants' primary food sources. Now wildlife

managers have taken the unprecedented step of feeding the animals, while scientists are in a race against time to restore the lost seagrass.

10/24/23 17:30 PM CHANGING SEAS #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.

10/30/23 17:30 PM CHANGING SEAS #201

NO FISH LEFT UNCOUNTED

How do you count two fish, three fish or even a school of fish? In Dry Tortugas National Park, located 70 miles from Key West, Florida, a group of scientists have joined forces to conduct a massive fish census.

10/31/23 17:30 PM CHANGING SEAS #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.

11/06/23 17:30 PM CHANGING SEAS #202

SENTINELS OF THE SEAS

Bottlenose dolphins are a beloved Florida icon. But, recent studies show disturbing signs of immune system dysfunction and disease plaguing this charismatic mammal.

11/07/23 17:30 PM CHANGING SEAS #404

COASTAL CARNIVORES

A co-production with Symbio Studios

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.

11/13/23 17:30 PM CHANGING SEAS #203

SEAGRASSES AND MANGROVES

They are an ancient species of flowering plants that grow submerged in all of the world's oceans. Seagrasses link offshore coral reefs with coastal mangrove forests.

11/14/23 17:30 PM CHANGING SEAS #501

CORAL HYBRIDS

Once a common sight in the Caribbean and Florida, Elkhorn and Staghorn corals are now listed as threatened on the U.S. Endangered Species list. But while these corals have declined in recent years, their hybrid appears to be increasing in parts of the region.

11/20/23 17:30 PM CHANGING SEAS #204

SINKING THE VANDENBERG

In the turquoise blue waters of the Florida Keys, a new attraction is drawing scuba divers from around the world: The USNS General Hoyt S. Vandenberg.

11/21/23 17:30 PM CHANGING SEAS #502

SUNKEN STORIES

The oceans are a graveyard of man's seafaring adventures. Today, underwater archaeologists are scouring the seafloor for clues to our maritime past.

11/27/23 17:30 PM CHANGING SEAS #301

ALIEN INVADERS

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.

11/28/23 17:30 PM CHANGING SEAS #503

CREATURES OF THE DEEP

In the cold, deep waters of the Gulf of Mexico, little-known animals spend their entire lives in near darkness, 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.

12/04/23 17:30 PM CHANGING SEAS #302

REEF REVIVAL

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.

12/05/23 17:30 PM CHANGING SEAS #504

REEFS OF RANGIROA

Scientists with the Global Reef Expedition are on a six year mission to study remote coral reefs around the world. Organized by the Khaled bin Sultan Living Oceans Foundation, the expedition kicked off in 2011, with plans to conduct research in the Atlantic, Pacific and Indian Oceans.

12/11/23 17:30 PM CHANGING SEAS #303

PRESCRIPTION: OCEANS

The oceans are part of America's newest medical frontier. In Florida, scientists are studying a variety of marine invertebrates which may hold the key to unlocking the secrets of our own biology.

12/12/23 17:30 PM CHANGING SEAS #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.

12/18/23 17:30 PM CHANGING SEAS #304 AFTER THE SPILL

The catastrophic oil spill in the Gulf of Mexico in April 2010 may no longer make headline news, but the story is far from over. Oceanographers continue to study the long-term effects this disaster might have on marine ecosystems.

12/19/23 17:30 PM CHANGING SEAS #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. 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.

12/25/23 17:30 PM CHANGING SEAS #401 TRACKING TIGERS

Tiger sharks are the ultimate apex predator. Scientists use satellite tags and DNA forensic tools to better understand the migrations of this magnificent species and to investigate the impacts of the world shark fin trade.

12/26/23 17:30 PM CHANGING SEAS #603 GALAPAGOS: WINDOWS INTO THE FUTURE

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.