



Coral Reef Ecosystems

Introduction

Let's learn about coral reefs! Read for a quick introduction to coral reefs. Find out what corals are and why they are so important! Follow this up by watching a <u>video introducing the coral reef habitats of Flower Garden Banks National Marine Sanctuary</u> and you will be on your way to becoming a coral expert! While watching the videos, use the guiding guestions below to record what you've learned.

- 1. Why do you think coral reefs are important?
- 2. In the videos, what wildlife did you notice using the coral reef as their home?
- 3. What is the most interesting thing you've learned about coral reefs so far?
- 4. What things do you think humans can do to help protect marine life and coral reefs?

Take a trip to Flower Garden Banks National Marine Sanctuary and see if you can identify all the letters of the alphabet found in the photos on <u>the Sanctuary Alphabet worksheet!</u> Found all the letters? Now try identifying the animals or objects in each photo that form our Sanctuary Alphabet!

Now let's move through the stages of a coral.

Coral Spawning

Watch <u>coral spawning in Flower Garden Banks</u>

<u>National Marine Sanctuary</u> to learn how a coral's life begins. Pair the video with <u>the Flower Garden Banks National Marine Sanctuary virtual dive activity sheet</u> to explore more about the basics of corals, their spawning process, and coral health.

Want to create your own reef and coral spawning event? Get creative with this coral spawning globe activity!



Photo: G.P. Schmahl/NOAA

Coral Reef Habitats

Watch this 1-minute video to introduce yourself to

Fagatele Bay, the origin of what is now the largest national marine sanctuary—
National Marine Sanctuary of American Samoa. Continue to explore this coral
reef habitat with a <u>virtual dive in Fagatele Bay</u>. Drag your mouse and zoom in and out to explore the reef. Be sure to keep an eye out for reef-dwelling critters like fish, eels, and crabs!

<u>Discover Big Momma</u>, one of the largest coral heads in the world, found in National Marine Sanctuary of American Samoa. Next, take a fascinating <u>360 degree look at Big Momma!</u>

Want to visit coral reefs in another national marine sanctuary? <u>Discover the secrets of the corals at Florida</u>
Keys National Marine Sanctuary. Pair it with this <u>Coral Reef Ecology Webquest</u> to show what you've learned!

You can also try a coral reef themed word search and a coral reef themed crossword puzzle!

Become a coral constructor and build your very own coral reef with this hands-on Lego activity. Pair it with

anatomy of a coral polyp handout, elkhorn reef building coral, and staghorn reef building coral to read more about how a reef is made and different types of reef building corals.

Threats to Coral Reefs and What Your National Marine Sanctuaries are Doing About it

Introduce yourself to the threats coral reefs are facing and what's being done to help them with this <u>2-minute video on restoring coral reefs</u> and this <u>article</u> explaining the impacts of natural disasters on coral reefs.

Wondering why we should care about keeping our coral reefs safe? Aside from providing important habitat to marine species, coral reefs can help support humans as well! Watch this <u>video about how coral reefs help support the U.S. economy.</u>

Embark on a <u>virtual dive of Florida Keys National Marine Sanctuary</u> to learn about how they are restoring their coral reefs. Pair this with the <u>Exploring Coral Restoration worksheet</u> to record your observations.

Photo: Shelley Dupuy/NOAA

Want to dive deeper into the difficulties corals are experiencing? Watch a <u>video explaining what coral bleaching is</u> and try this <u>Coral Bleaching Investigation activity</u>. Or, for younger scientists, download the <u>Why is Hawaii's Ocean Important?</u> activity book!

Want to learn about all the different types of corals living in America's underwater parks? Click here to find NOAA Fisheries' full coral species list!



Photo: NOAA

<u>Download the ParkPassport App</u> to learn more about national marine sanctuaries. Take virtual tours, view live webcams, earn digital badges, and more.

All information in this document was adapted from the NOAA Office of National Marine Sanctuaries' resources. This collection was developed in partnership with the National Park Trust in support of the 50th anniversary of the National Marine Sanctuary System. The inclusion of links in this guide does not imply endorsement or support of any of the linked information, services, products, or providers.

