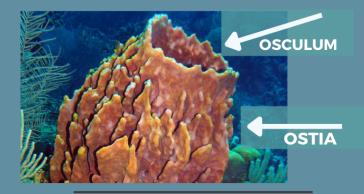


WHAT IS A GIANT BARREL SPONGE?

- The Giant Barrel Sponge is the largest sponge, growing 6-8 feet tall.
- Though they look like plants, they are animals.
- Two types exist:
 - Xestospongia muta Caribbean & Gulf of Mexico (See red X)
 - Xestospongia testudinaria Indo-Pacific Ocean (See green circle)
- They are barrel-shaped and can be brown, red, or
- The osculum (top hole) helps them filter food from water.



WHY ARE THEY IMPORTANT?

- Water purification: Sponges filter water and release it cleaner than before.
- Ecosystem support: By cleaning gallons of water every day, they keep the ocean healthy.
- Marine shelter: Their large size gives crabs, fish, and other sea creatures a place to live.



WHAT/HOW DO THEY EAT?

- Giant Barrel Sponges eat by filtering tiny organisms like bacteria and phytoplankton.
- Water flows in through ostia (tiny holes on the sides).
- They absorb nutrients and release clean water through the <u>osculum</u> (top opening).





Scan this QR code to learn more information about Giant Barrel Sponges!

1. Detailed Description of the Target Audience

For my IA assignment, I am targeting a younger audience or individuals who may not be familiar with marine life and animal sciences. I imagine my exhibition label being distributed to younger students, such as 8th graders, or displayed in a museum catered to middle and high school students and their families. My goal is to use language that is accessible to everyone, even those without a scientific background. However, I assume my audience understands what a scientific name is, so I do not need to explain that concept. Additionally, I am addressing a general audience, including the broader public, by using clear and easy-to-understand vocabulary.

2. Explanation of the Specific Purpose of the Artifact

The primary purpose of this artifact is to **inform and educate** my audience about **Giant Barrel Sponges**. I am not presenting an argument or advocating for a proposal; rather, I aim to share knowledge and spark curiosity about these fascinating marine organisms. I want to **engage and excite** my audience, helping them understand how Giant Barrel Sponges function and contribute to their environment.

By educating the public, especially younger audiences, I hope to **inspire greater interest in marine life and biodiversity**. While my artifact is not focused on advocating for conservation or climate action, increasing awareness about marine ecosystems can encourage more people to appreciate and protect them. My goal is simply to provide **educational insight** into Giant Barrel Sponges and their essential role in marine life.

A **bibliography** for sources/images (in CSE format)

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