

World's Deepest Blue Hole

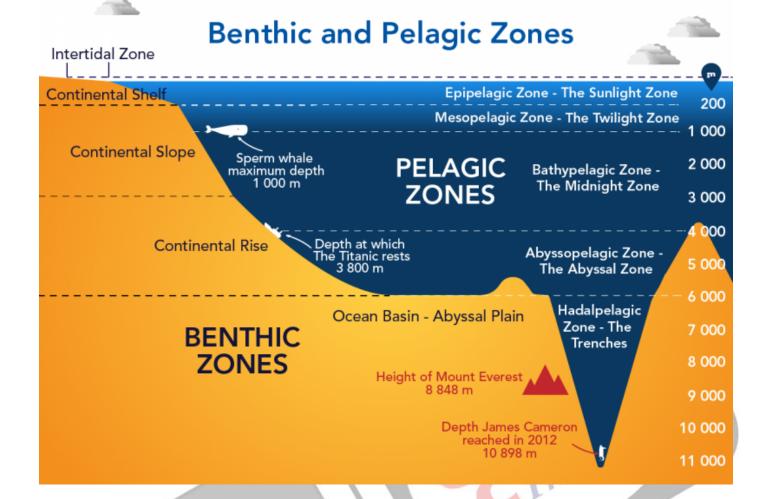
Source: TOI

Recently, researchers have discovered the <u>world's deepest blue hole</u> located in Mexico's **Chetumal Bay in Mexico, known as Taam Ja' Blue Hole (TJBH).**

- It was originally believed to be the second deepest. However, recent measurements have shown that it exceeds 420 meters below sea level (mbsl), making it deeper than any other known blue hole.
 - The new measurement reached into the **mesopelagic zone**, where sunlight is significantly reduced, and marine life concentration is high.
 - TJBH's depth surpasses other well-known blue holes such as the Sansha Yongle Blue Hole in the South China Sea (301 mbsl) and the Dean's Blue Hole in the Bahamas (202 mbsl).
- Blue holes are underwater sinkholes, similar to sink holes on land. They vary in size, shape and depth, but most are <u>ecological hot spots</u> with a high diversity of abundance of plants and animals including corals, sponges, mollusks, sea turtles, sharks etc.
 - Exploration of blue holes has been limited due to challenging access conditions, as most blue holes have small openings that are several hundred feet underwater, making them inaccessible for automated submersibles.

| Feature | Blue Holes | Deep Trenches |
|-----------|----------------------------------|-------------------------------------|
| Formation | Cave collapse | Subduction of tectonic plates |
| Location | Continental shelves, reefs, etc. | Convergent plate boundaries |
| Depth | Variable, from shallow to very | Deepest parts of the ocean (Mariana |
| | deep | Trench>36,000 ft) |

 \coprod



Read more: Biological hotspots

PDF Refernece URL: https://www.drishtiias.com/printpdf/world-s-deepest-blue-hole