

# Mokupāpapa Discovery Center



*Third Thursday Lecture Series Presents:*

## Deep-water explorations of black corals in the Northwestern Hawaiian Islands

Antipatharians, commonly known as black corals, are a little studied group of corals that are primarily found in deeper environments, with over 75% of described species occurring below 50 m. At these depths, black corals are often abundant and dominant faunal components, and create habitat for a myriad of species. Despite their importance, very little is known about the basic biology and ecology of black corals, because most species inhabit areas that are not accessible through conventional SCUBA diving, and thus advanced diving technologies are required to study these organisms. Since 2009, multiple research expeditions have been launched to explore deeper water (50-100 m) environments within the Papahānaumokuākea Marine National Monument using mixed-gas technical diving.

Several black coral populations have been surveyed as part of these efforts, leading to multiple significant discoveries. These include the finding of previously undescribed species, geographic range expansions of known species, the discovery of zooxanthellae within black corals at record depths, and important insights into sexual reproductive processes of numerous species. Collectively, these findings highlight the importance of surveying the deeper depth range of coral reef ecosystems, which remain largely unexplored.

### Presented By:

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Papahānaumokuākea Marine  
National Monument



Photo Credit: Greg McFall

Photo Credit: Ray Boland

**Thursday, March 15<sup>th</sup>, 2012**

**6:00 - 7:00 p.m.**

**Mokupāpapa Discovery Center, Hilo**

**FREE EVENT**