



Press Release

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Rapid response team investigates coral disease outbreak in Kaneohe Bay, Oahu

An outbreak of a disease called Montipora White Syndrome (MWS) was found in Kaneohe Bay, Oahu within the last month prompting an interagency response team composed of scientists and students to document the extent, spread and potential causes of the disease. Members of the investigative team included scientists from the University of Hawaii at Manoa's Hawaii Institute of Marine Biology (HIMB), USGS National Wildlife Health Center and Bishop Museum.

Corals are the very foundation of our coral reef ecosystem and are under threat from overfishing, land-based pollution and emerging coral diseases. Coral diseases have devastated the reefs of the Florida Keys, and MWS affects a prominent coral species (red rice coral or *Montipora capitata*) on Hawaii reefs and rapidly kills colonies in weeks. The disease was originally discovered by Bob Tangaro, a boat driver at HIMB, who notified coral disease researcher Dr. Greta Aeby of his grisly discovery. Mr. Tangaro is a member of the Eyes of the Reef Reporting Network, a program that trains community members to identify threats to Hawaii's reef including coral disease.

The investigative team discovered that over a 100 colonies of red rice coral have been killed by MWS. Clusters of diseased corals were found on reefs throughout Kaneohe Bay but the disease appears most prominent in South Kaneohe Bay. The cause of the disease is unclear, and laboratory studies are underway at HIMB and USGS to determine this. Coral diseases in Hawaii have been studied by HIMB and USGS since 2001, and these research groups have documented 17 different diseases that occur at fairly low levels; however, this recent outbreak appears particularly severe. In 2003, Dr. Aeby discovered an outbreak of *Acropora* White Syndrome causing rapid tissue loss in table corals (*Acropora cytherea*) from French Frigate Shoals in the Papahānaumokuākea Marine National Monument; this disease killed numerous large corals. In January 2010 DAR biologists on Maui investigated an outbreak of chronic Montipora White Syndrome at Ahihi Kinau. These events illustrates that, like in the Caribbean, coral reefs in the Pacific are susceptible to disease outbreaks. Given that these reef resources play an important role in the culture and economy of Hawaii, understanding these outbreaks and their causes can help us prevent or at least mitigate the impact of future events.



Acute Montipora white syndrome causes rapid tissue loss stripping corals of live tissue leaving the dead white skeleton underneath. This photo shows a trail of dead and dying corals as the disease spreads across the reefs. Taken in Kaneohe Bay by Greta Aeby

For more information, please see the Marine Disease Research Lab website <http://www.himb.hawaii.edu/HawaiiCoralDisease/>

High resolution image available, contact Tara Hicks Johnson or Greta Aeby.

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