SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY

Press Release

Thursday, January 5, 2012

Another outbreak of coral disease hits reefs of Kaneohe Bay, Hawaii

Honolulu, HI – The disease called acute Montipora White Syndrome (MWS) has reappeared and is again killing corals in Kaneohe Bay, Oahu. The current outbreak has already affected 198 colonies of rice coral (Montipora capitata). In March 2010 an outbreak of MWS was discovered affecting coral reefs in Kaneohe Bay. Follow-up surveys found that the disease left trails of rubble in its wake. It was estimated that over 100 colonies of rice coral died during that initial outbreak. A rapid response team led by Dr. Greta Aeby, Assistant Researcher at the Hawaii Institute of Marine Biology (HIMB) at the University of Hawaii - Manoa (UHM),

has been activated to document the outbreak. Members of the investigative team include scientists from the UH,



Large red rice coral in Kaneohe Bay, Oahu, Hawaii affected by acute *Montipora* White Syndrome. The disease results in live tissue being stripped from the coral leaving the dead white skeleton. The striped scale bar is approximately 5 inches. Photo courtesy of Christine Runyon, University of Hawaii - Manoa.

HIMB, and United States Geologic Survey (USGS) National Wildlife Health Center.

Corals are the very foundation of our coral reef ecosystem and are under threat from overfishing, land-based pollution and emerging coral diseases. Successive disease outbreaks with little intervening time for growth and repair of the corals are particularly damaging to reefs. Dr. Aeby's team has been studying MWS for the past several years and has determined that it is an infectious disease that only affects rice corals (*Montipora* sp.). Laboratory experiments suggest that MWS is caused by pathogenic bacteria. Work is underway to understand environmental variables, such as increased seawater temperatures associated with climate change or land-based sources of pollution, that may contribute to these recurring disease outbreaks. Reef resources play an important role in the culture and economy of Hawaii and discovering the cause(s) will help resource managers and scientists develop methods designed to prevent or mitigate the impact of outbreaks on Hawaii's reefs.

Members of the Eyes of the Reef Network (EOR), a program that trains community members to identify threats to Hawaii's reefs, are being asked to report on any signs of disease from other reefs. For more information or to join the Eyes of the Reef Network, please go to the EOR website (<u>http://www.reefcheckhawaii.org/eyesofthereef.htm</u>) and the EOR Facebook page (http://www.facebook.com/pages/Eyes-of-the-Reef-Network/278832035489589).



Picture on left shows a trail of dying, white corals on the reef in March 2010. Picture on right shows the same area of the reef in May 2011 with barren rubble where the live corals once were. Photos are courtesy of Greta Aeby, University of Hawaii – Manoa.

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