



Ocean heat hits weed

The decimation by an ocean heatwave of a seaweed that provides vital habitat for a web of marine species off the WA coast has been revealed in a scientific paper.

UWA's Daniel Smale and Associate Professor Thomas Wernberg said ocean temperatures at Jurien Bay were five degrees higher than normal and for many weeks sea temperatures along more than 2000km of the WA coastline were two to four degrees higher than normal.

The most extreme warming event began in December 2010 and peaked in March 2011.

"We've surveyed this coastline at three locations – Hamelin Bay, Marmion and Jurien Bay – almost every year since 2006," Dr Smale said.

"During this heatwave we found that the seaweed *Scytothalia dorycarpa* – one of the most prominent habitat-forming species of the temperate coastline – retracted its range some 100km because the extreme temperatures exceeded its physiological threshold.

"This may have far-reaching implications for the structure and functioning of the marine ecosystem in the region, which is a global biodiversity hotspot."

The damage to the weed left rocky reefs uncovered and reduced the amount of habitat available for small invertebrates and some other algae.