



## SEAWEED DIES

# Hot water peril for marine life

■ Michelle Wheeler

A record ocean heatwave that led to a rise in seawater temperatures two years ago has caused an important species of seaweed to disappear from a section of the coast, according to a University of WA study published yesterday.

Marine biologists surveying near Jurien Bay found the range of the seaweed, *Scytothalia dorycarpa*, shrank during the heatwave, leaving rocky reefs uncovered and reducing habitat for small marine creatures and other seaweed.

This could have knock-on effects for fish higher up the food chain.

“Certainly for now there’s large gaps in the (seaweed) canopy but it could be that after time something comes to replace this species and also the dominant kelp, which was impacted to some extent,” lead author Daniel Smale said.

The heatwave began in Decem-

ber 2010 and peaked in March 2011. Temperatures were 2C to 4C higher along 2000km of WA coastline, with seawater temperatures at Jurien Bay increasing by a peak of 5C.

The seaweed findings are the latest results from a project monitoring marine life at Jurien Bay, Marmion and Hamelin Bay almost every year since 2006.

Research by the same team published last year found there were more tropical fish at Jurien Bay, with the proportion of tropical species rising from 5-10 per cent before the heatwave to up to 20 per cent afterwards.

Dr Smale predicted that marine species would shift their distribution towards the poles as waters warmed because of climate change.

But he said the Jurien Bay study was important because actual evidence from the field of shifting dis-

tributions was quite rare.

“That’s particularly true for marine ecosystems which are quite hard to study,” he said.

“It’s not like a forest where you can just take lots of area pictures or go and sample quite easily.”

The heatwave has been blamed for other changes to WA’s marine environment, including the bleaching of coral at Ningaloo Reef and changes to commercial fish stocks.

The Fisheries Department has also claimed that cool water forced towards the WA coastline by warmer tropical water flowing south may have been responsible for an increase in shark activity off the metropolitan coast.

The research was published in the journal *Proceedings of the Royal Society B*.



**At risk:** Researchers collect samples at Jurien Bay, where an ocean heatwave has affected seaweed. Picture: Associate Professor Thomas Wernberg