FORESTS OF THE SEA – a stop-motion animation

Lynchpin 2012 project: Tasmanian East coast waters as a global ocean warming 'hot spot'.

Forests of the Sea is an arts/science collaboration producing a stop-motion animation visualising the effects of the changed climate on the East coast of Tasmania. This part of the coast is home to the iconic Giant Kelp Forest, now listed as an endangered marine plant. The animation gives an overview of a local science story and presents a visual narrative, illustrated with quirky characters and colourful marine scenes, developed using different collage, print techniques and ink. The project is a collaboration between two Marine Science PhD Candidates from the Institute for Marine and Antarctic Studies (IMAS), University of Tasmania (UTAS), Jorge Ramos Castillejos from Mexico and Felipe Briceno Jacques from Chile, with Dutch Artist, Malou Zuidema.

The project was part of the *Lynchpin Scholarship Program* for 2012. Lynchpin was developed to promote the significance of the oceans to life on the planet and especially to encourage arts/ocean science conversations and collaborations that bring these stories to the public in new ways. The program is endorsed by IMAS/UTAS and supported by the Bookend Trust. The stop motion animation was backed by Redmap, and had the mentoring support of Dr. Lisa Roberts of *Living Data*.

The East Australian Current has moved 350 miles further south over the past fifty years with the result that Tasmanian East coast waters are warming at the rate of three to four times the global average. Warm nutrient poor waters alter the fragile marine ecosystem and as a consequence the Giant Kelp Forests of the East Coast of Tasmania are rapidly disappearing, endangering the habitat of many local species including the Southern Rock Lobster. These warmer waters bring with them invasive species, further threatening local species.

Resulting change to the marine ecosystem has also impacted the local fishing industry and its traditions. The Southern Rock Lobster has been an iconic and lucrative species supporting Tasmanian Southern Rock Lobster fisheries for generations: presently losses in the region of \$1.4 million annually are being experienced as a result of the noted changes. In the animation we wanted to promote cooperation between science and the fishing industry to make real what is taking place and point to collaborative planning for the future.

Throughout the process we asked ourselves the question "who is the science for?". Science is a highly complex and fact based profession, often hard to understand for those who do not work in the field. Using the art of stop-motion animation here allowed the opportunity to explore an alternative way to communicate and make science accessible, trying to touch the emotions and imagination of the public and bring them into the story of change. Projects like this give the opportunity to explore different narratives and connect different science components into one story. As artist, my aim was to give a sense of being present within the changing environment.



Lynchpin : encouraging arts/ocean science conversations and collaborations