



UWA KELP RESEARCHERS THOMAS AND THIBAUT WITH THE FRENCH DIVE TEAM (FROM LEFT TO RIGHT): LAURENT LÉVÊQUE, THOMAS WERNBERG, MATHIEU CAMUSAT, YANN FONTANA, JEAN-CHARLES LECLERC AND THIBAUT DE BETTIGNIES (PHOTO BY DOMINIQUE DAVOULT). IN THE BACKGROUND ARE TWO COMMERCIAL KELP TRAWLERS.

Oceans Institute LINKs with Europe for kelp research

OI researchers recently returned from three months in Western Europe, leading a new campaign connecting research on kelp ecophysiology across continents. Associate Professor Thomas Wernberg and Dr Thibaut de Bettignies have taken on a field campaign, investigating the impacts of climate change on kelp across the northern and southern hemispheres. Fostering strong links with their European counterparts, Professor Wernberg and Dr de Bettignies explored links in kelp research between world leading marine research institutions.

In Australia and Europe, kelps (large brown seaweeds) are ecologically and economically important. They sustain vast biodiversity and commercial fisheries and are often harvested for human use. However, kelps are highly temperature-sensitive and declines in local kelp populations have already been linked to increasing seawater temperatures in both hemispheres.

Professor Wernberg and Dr de Bettignies, from UWA's School of Plant Biology, have taken on this field campaign in Europe to LINK (Latitudinal and Inter-hemispherical Network in Kelp ecophysiology) research into kelps and climate change across the continents.

The trip was a three month immersion into kelp forest physiology, ecology and biogeography in close collaboration with experts from CIIMAR (University of Porto, Portugal), the Marine Biological Station at Roscoff (University Paris VI, France) and the Norwegian Water Research Institute (Norway).

Thomas and Thibaut performed numerous dives to undertake experiments in the cold-temperate European waters. With water temperatures as low as 5°C, the use of dry-suits was an absolute necessity. Not only did Thomas and Thibaut have a successful trip with great research outcomes, they also established strong professional friendships within their colleagues in Europe.

"This trip has been incredibly fun and rewarding, but we have also learnt a lot about similarities and differences between European and Australian kelp forests, and this experience has only raised more questions we now want to pursue with our new collaborators," said Thibaut.

This collaboration was supported by a UWA Research Collaboration Award, the France-Australia Science Innovation Collaboration (FASIC) 2014 program and the Australian Research Council.



KELP FOREST OF *LAMINARIA HYPERBOREA* NEAR THE ISLAND OF FINNØY ON THE WEST COAST OF NORWAY.