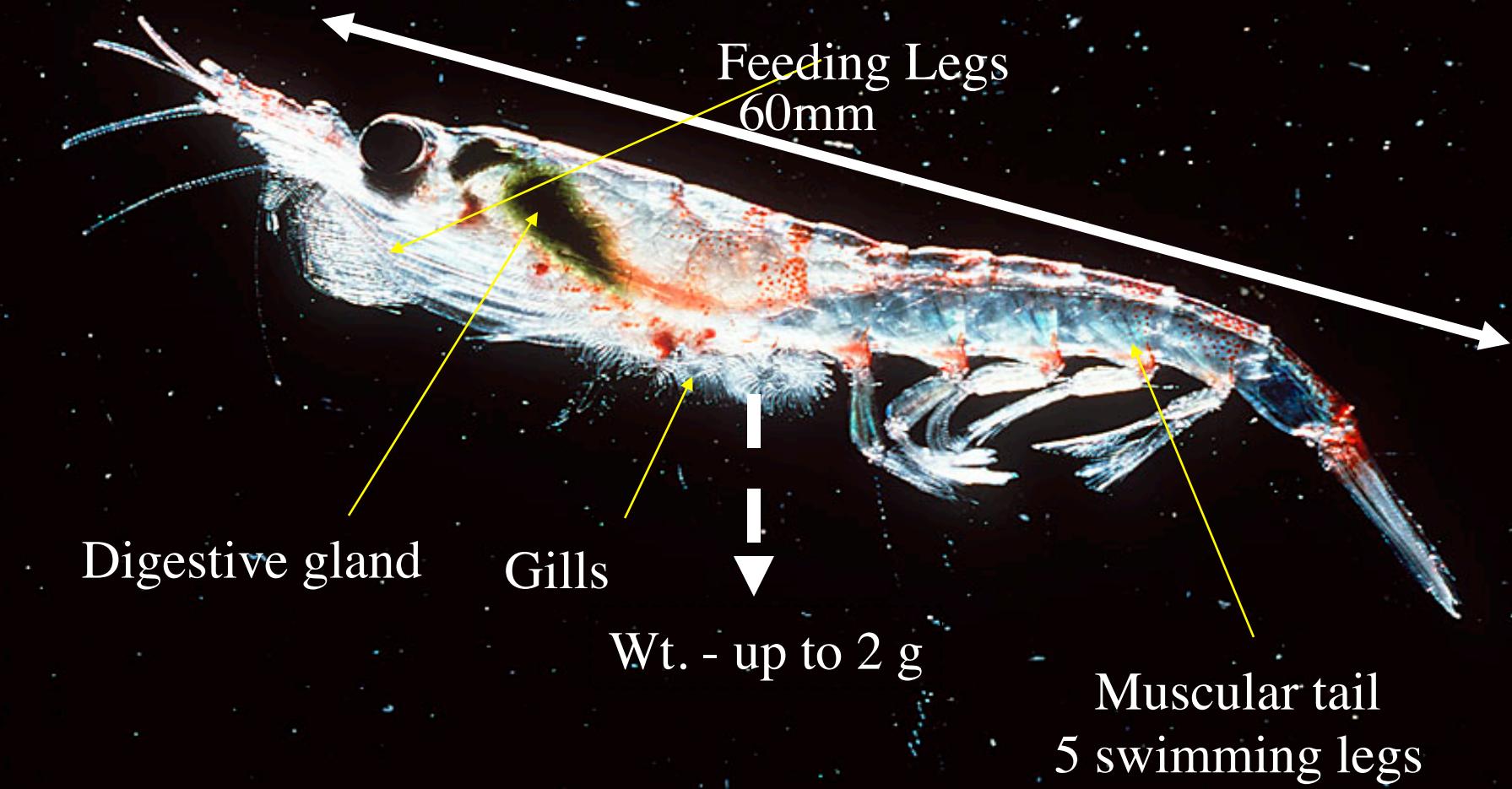


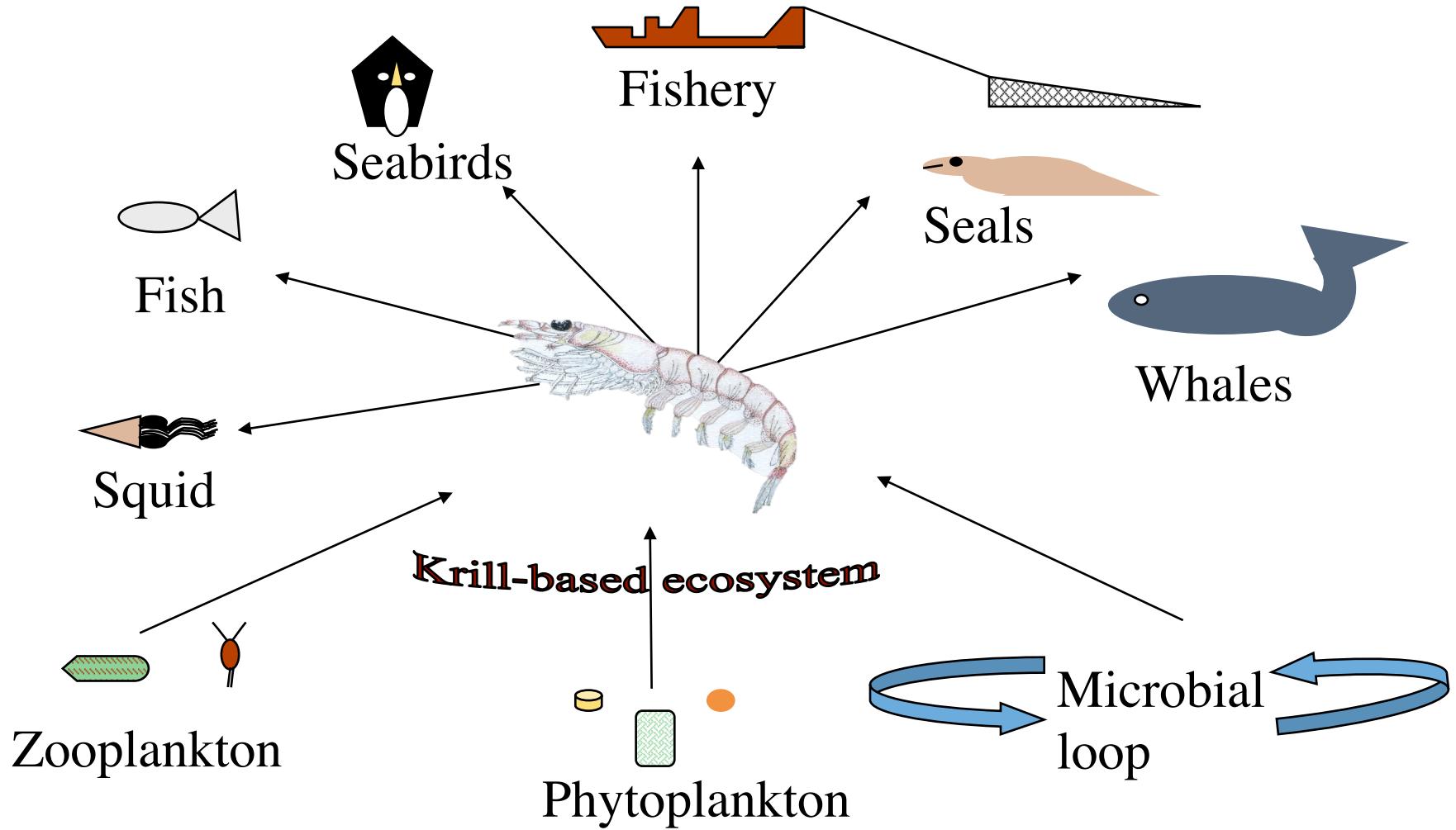
A large, textured iceberg dominates the background, its white and blue hues contrasting with the dark blue water at the bottom. The sky above is a uniform, pale grey.

Utilising innovative fishing technology to investigate the oil and fatty acid composition of Antarctic krill

Jess Ericson, Nicole Hellessey, Peter Nichols,
Nils Hoem, So Kawaguchi, Steve Nicol,
Patti Virtue

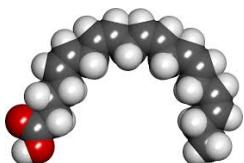
Antarctic krill



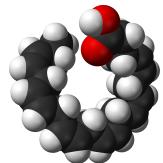


Krill Lipids

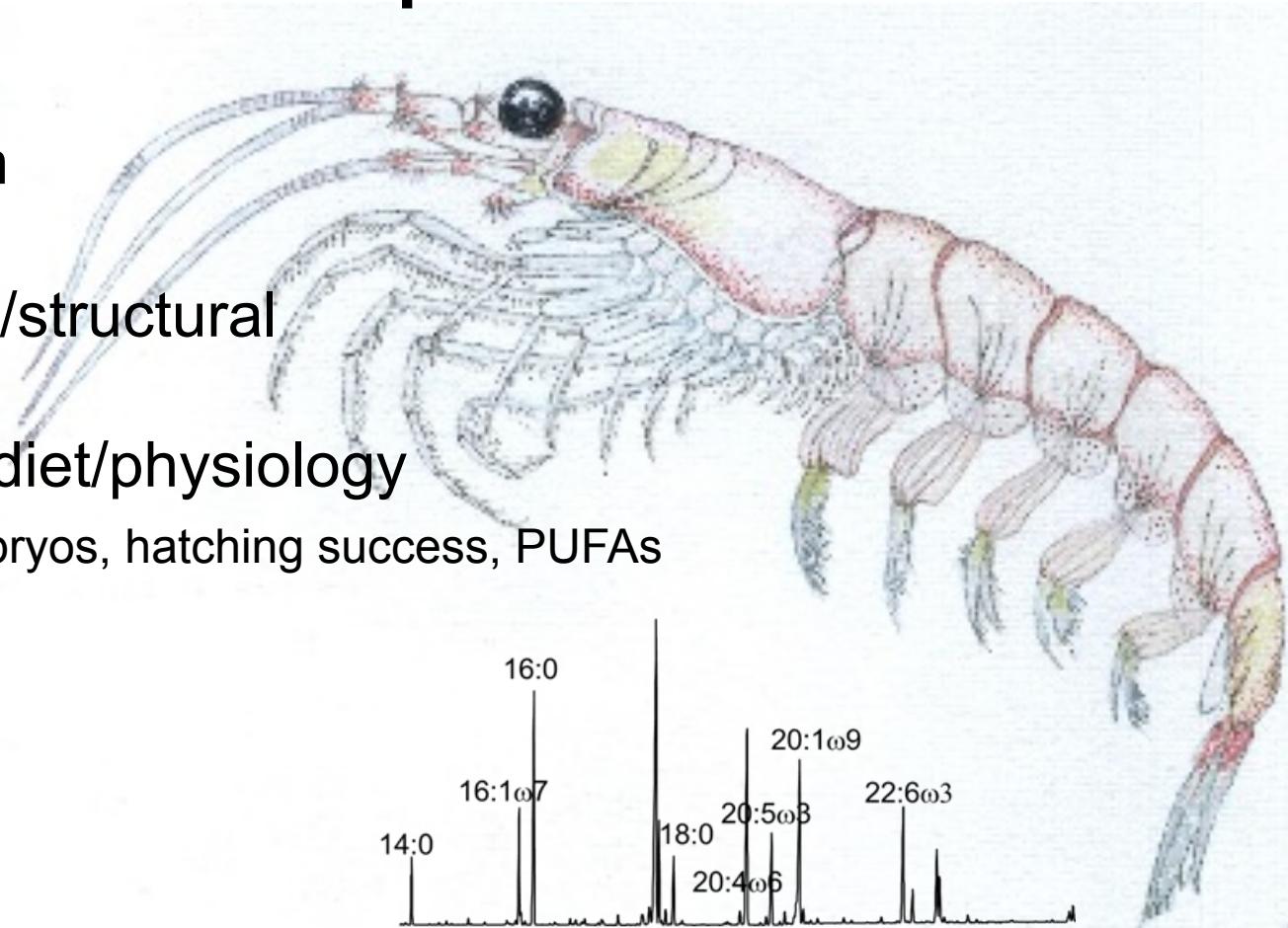
- Total lipid- condition
- Lipid class- storage/structural
- Fatty acid profiles- diet/physiology
 - maternal krill, embryos, hatching success, PUFAs

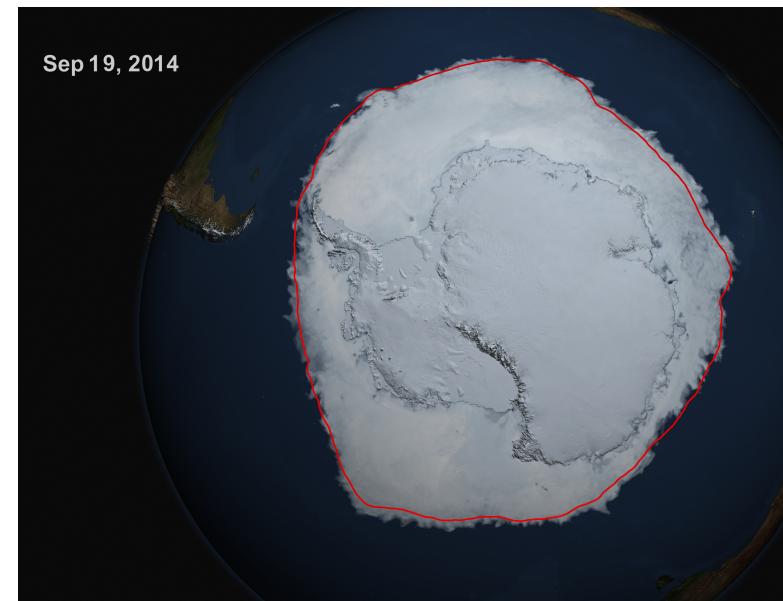


EPA



DHA



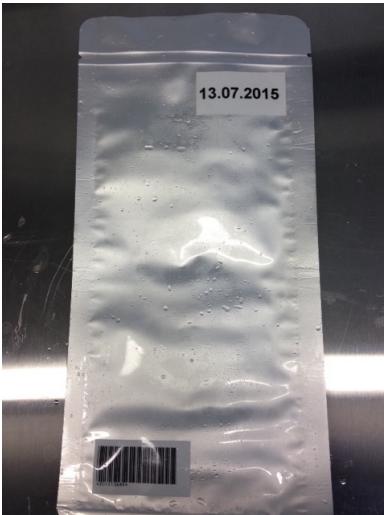
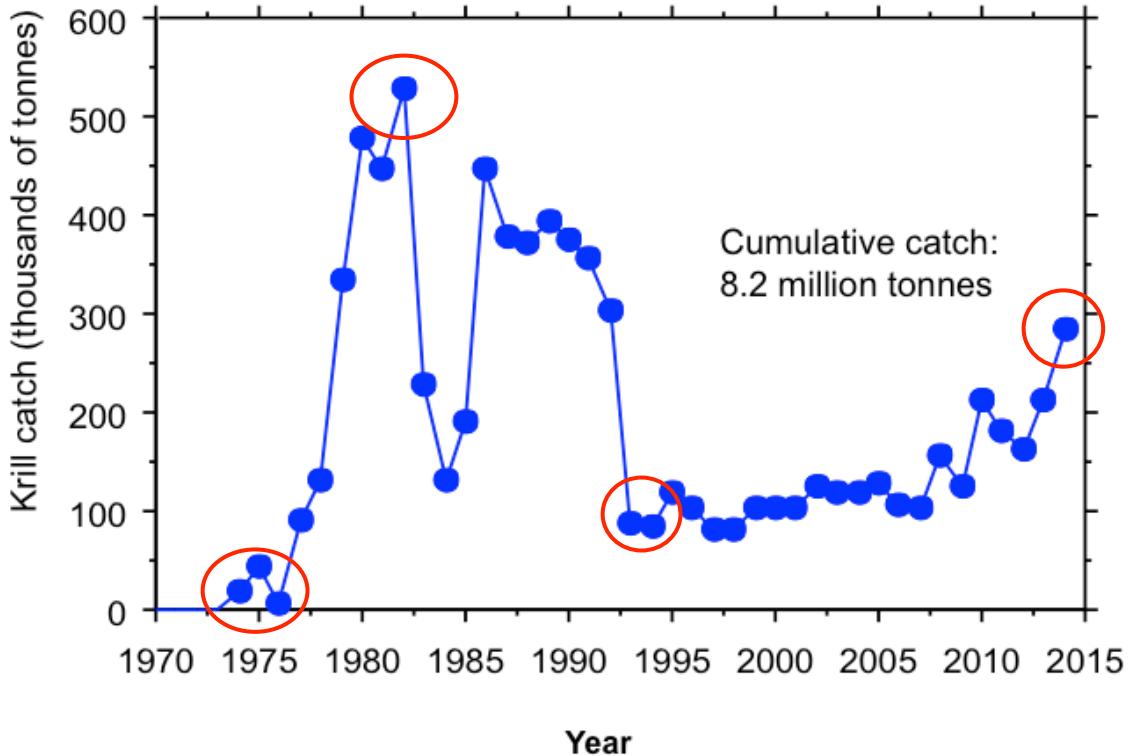


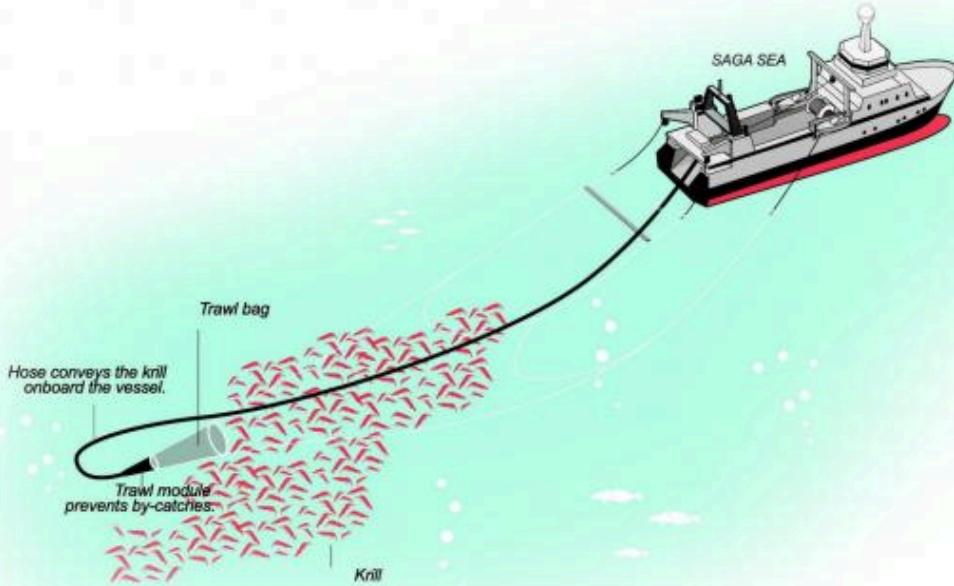


The krill fishery



Annual catch of Antarctic krill





Equipment stays under water while a continuous stream of water flows through the hose, bringing the krill live and fresh directly into the factory vessel



CCAMLR



60.3

MILLION TONS OF KRILL
IN AREA 48 ALONE



9.35%

IS THE HARVEST QUOTA
SET BY CCAMLR



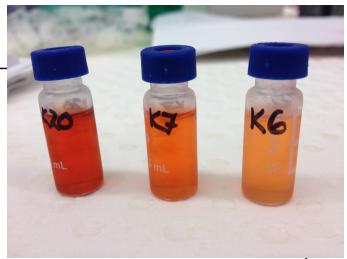
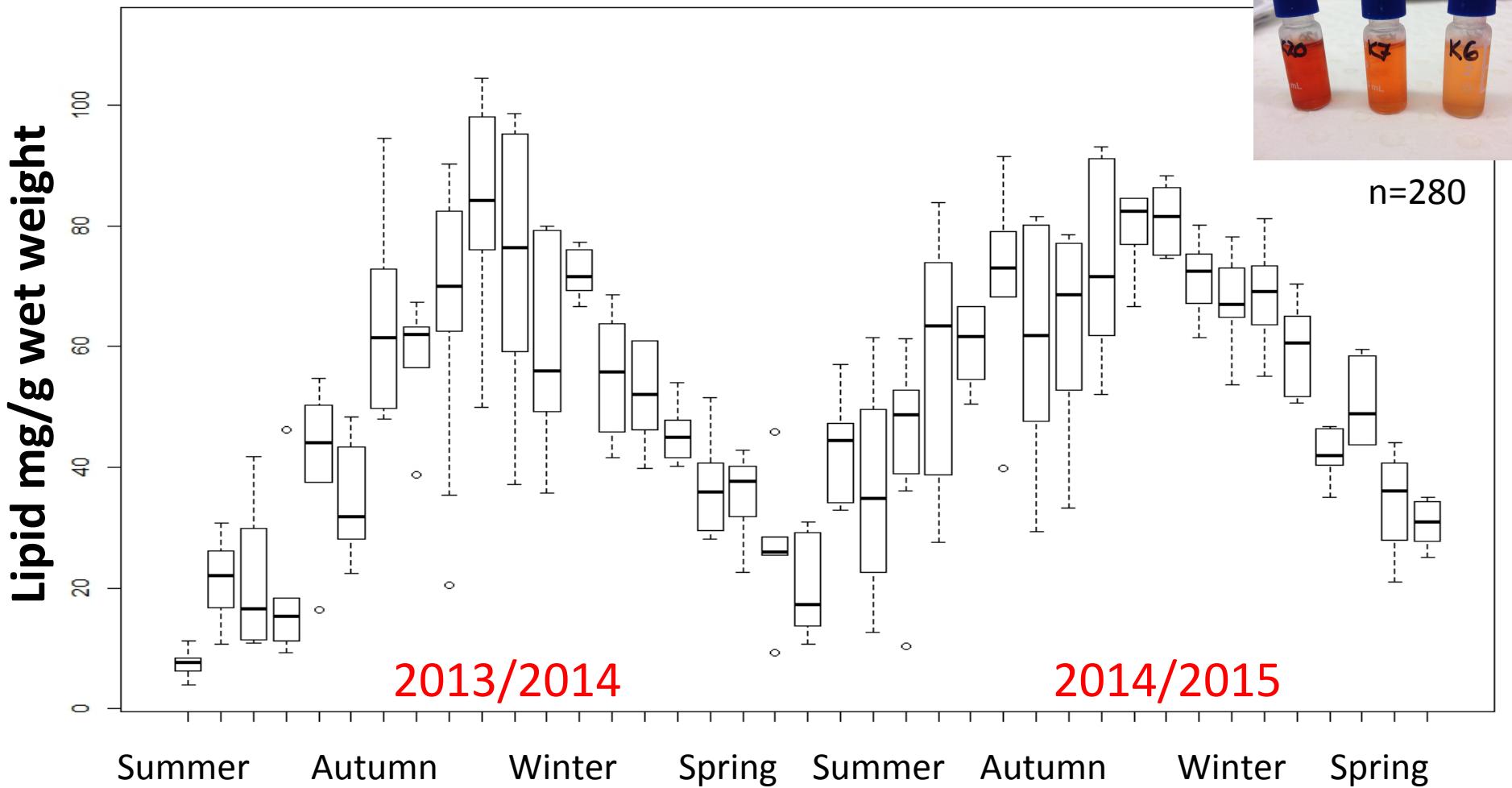
1/3 of 1%

IS THE TOTAL AVERAGE CATCH
OF THE ENTIRE KRILL FISHERY
ANNUALLY

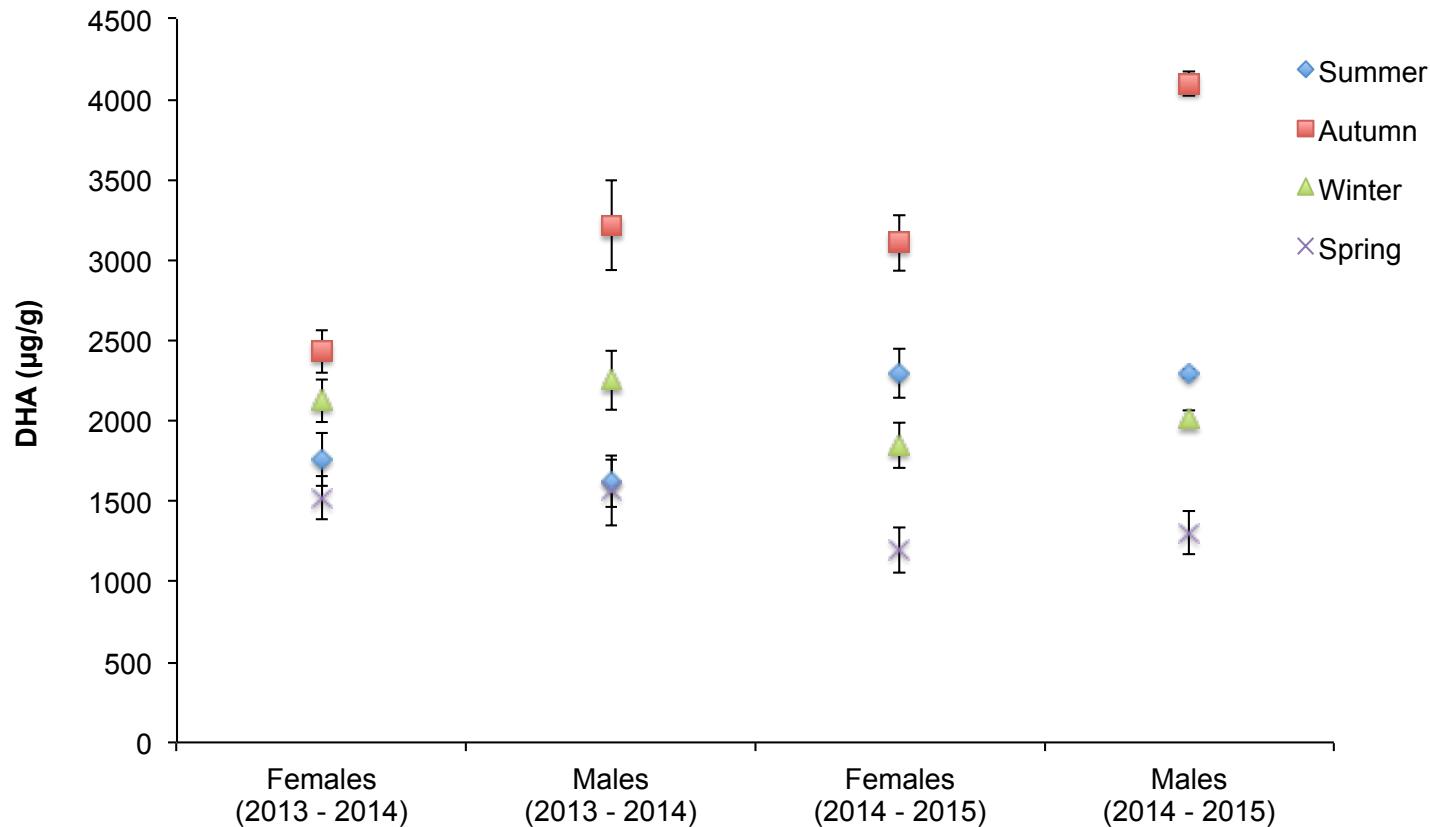


Antarctica

Lipid Content



Seasonal Variation of DHA



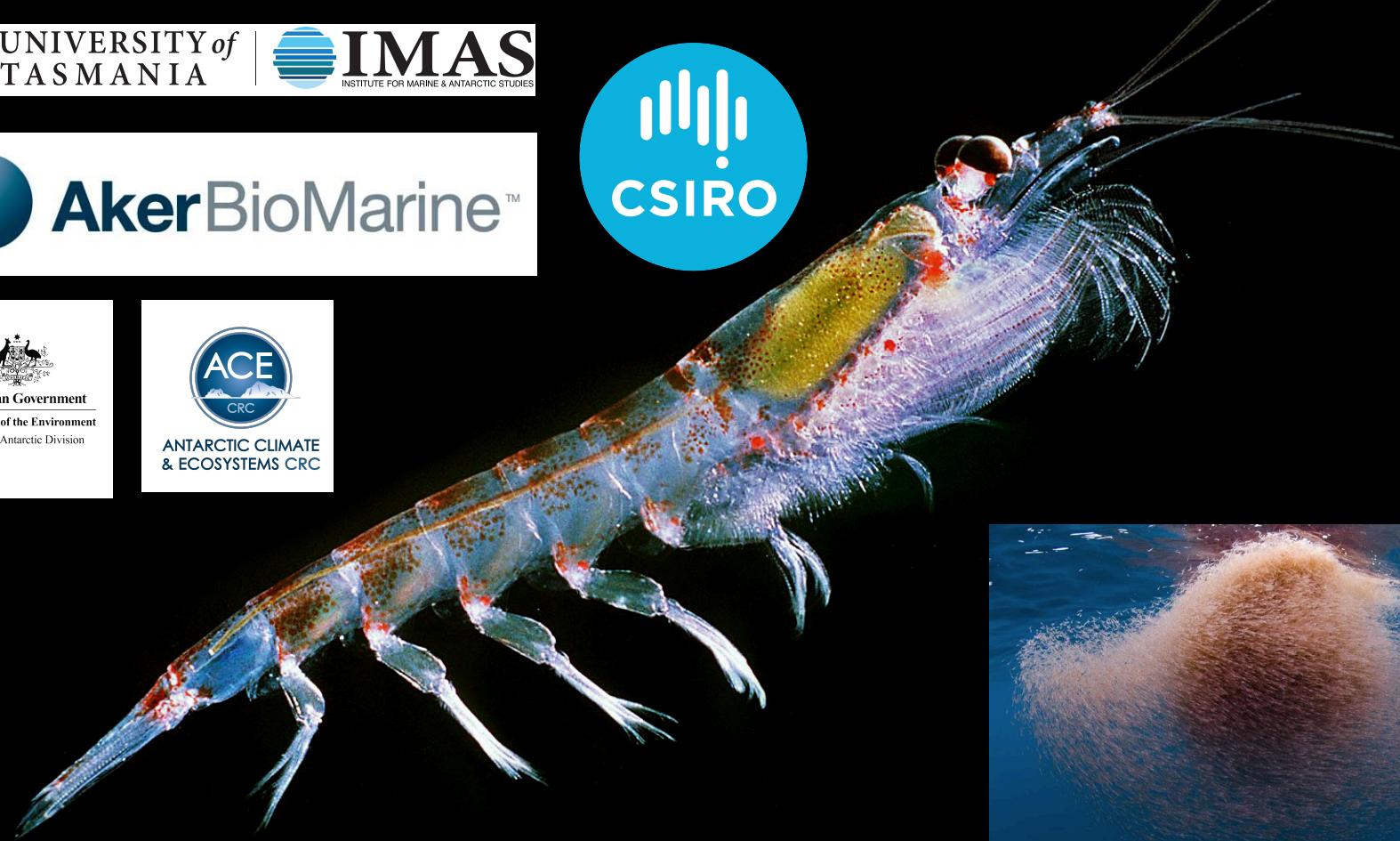
Summary

Keystone species in the Antarctic ecosystem

Huge biomass and rich source of omega-3

Sustainable fishery- regulated via CCAMLR

Our results can assist the fishery & to answer important questions about krill biology & ecology



Research funded by an ARC Linkage Grant