

Biological Use Case

**Polar Data Planning Summit
Boulder, USA May 2018**

<http://bit.ly/biooceanusecase>

Pip Bricher, Henry Huntington, Jackie Grebmeier, Danielle Dickson, Neil Holdsworth

Austral Fisheries, 2003



<http://www.coolantarctica.com>



<http://carnivoraforum.com>

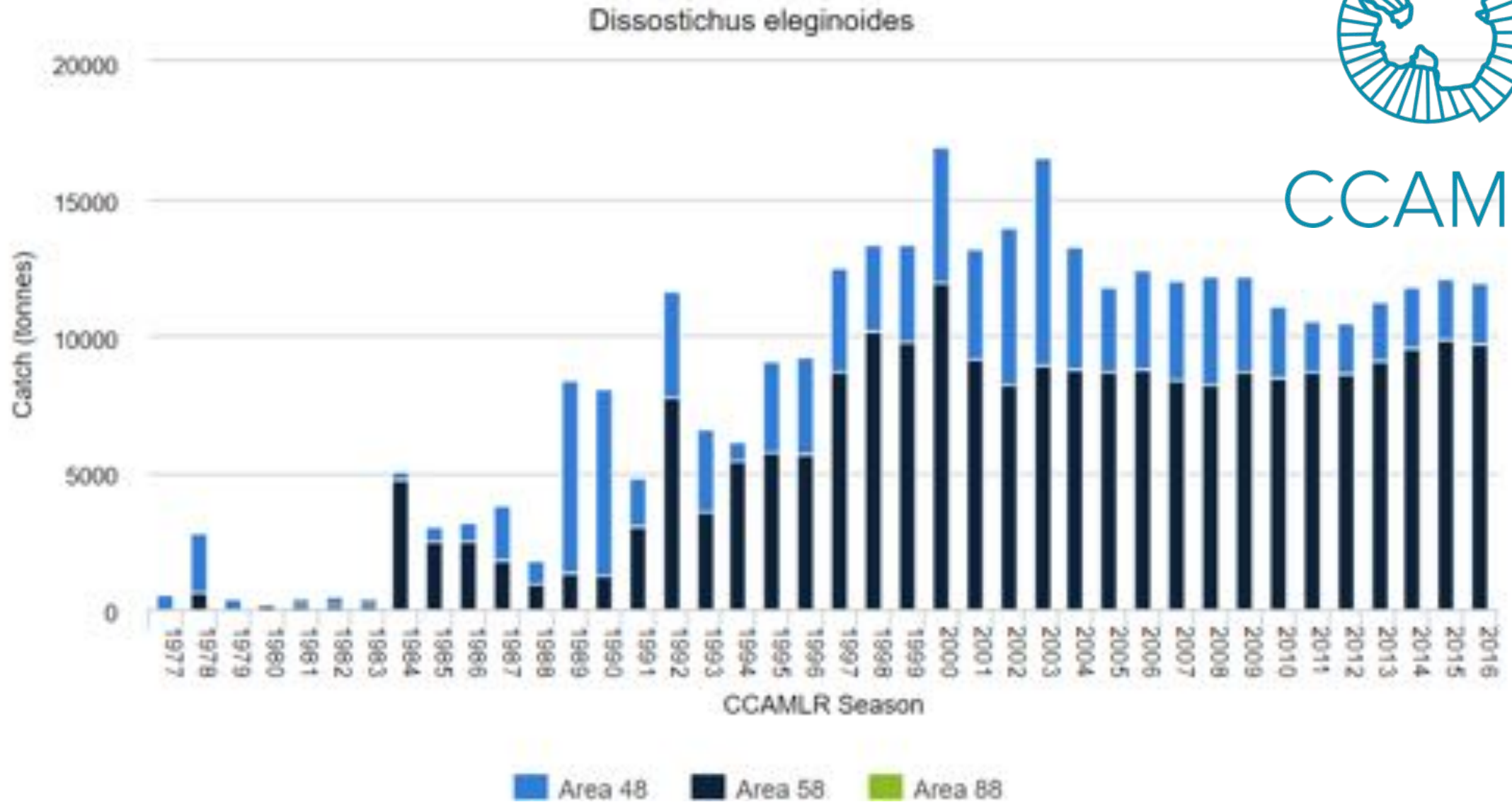
<http://www.Antarctica.gov.au>

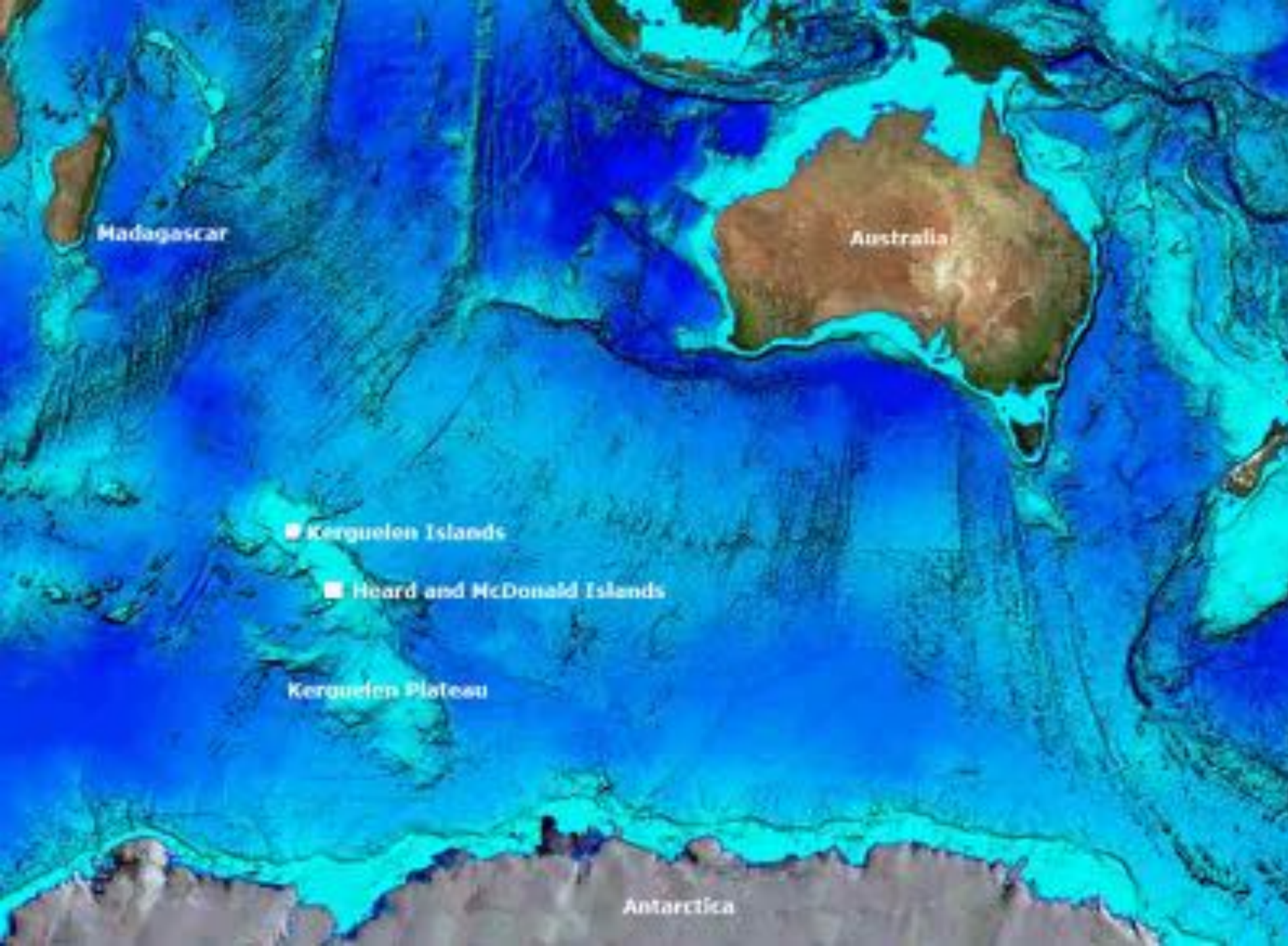


Catch history



CCAMLR







Declining summer sea ice could open the Arctic Ocean to commercial fishing. NASA/KATHIRYN HANSEN/Flickr (CC BY 2.0)

Nations agree to ban fishing in Arctic Ocean for at least 16 years

By Hannah Hoag | Dec. 1, 2017, 1:30 PM

<http://www.sciencemag.org/news/2017/12/nations-agree-ban-fishing-arctic-ocean-least-16-years>



<http://www.hamnisenja.no>



<https://fisheries.msc.org/>

www.arctic.uoguelph.ca



www.allensfisheries.com



[Wikipedia](#)

Van Pelt et al. (2017)

<https://doi.org/10.1016/j.marpol.2017.08.008>



Research Questions

- Are there identifiable correlations or causal relationships between the apparent shifts in Arctic fish/Patagonian Toothfish catchability and oceanographic change and dynamics for the Central Arctic/Kerguelen Plateau regions?
- Are changes and dynamics in any relevant oceanographic variables predictable at a regional scale?
- Are changes in Arctic fish/toothfish catchability correlated or causally related to broader ecosystem parameters?

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Data Types

- From fishing vessels
- Fishery surveys
- Satellite-derived oceanography
- Model output
- In-situ oceanographic observations
- Ecosystem observations (prey, predators, chlorophyll)
- Atmospheric data

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