


Co-existence in practice: Europe's largest lobster fishery and their interaction with offshore wind energy

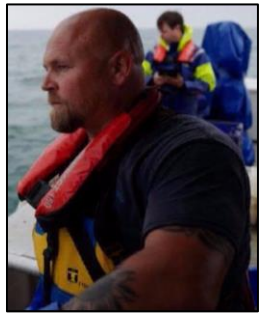
Dr Mike Roach

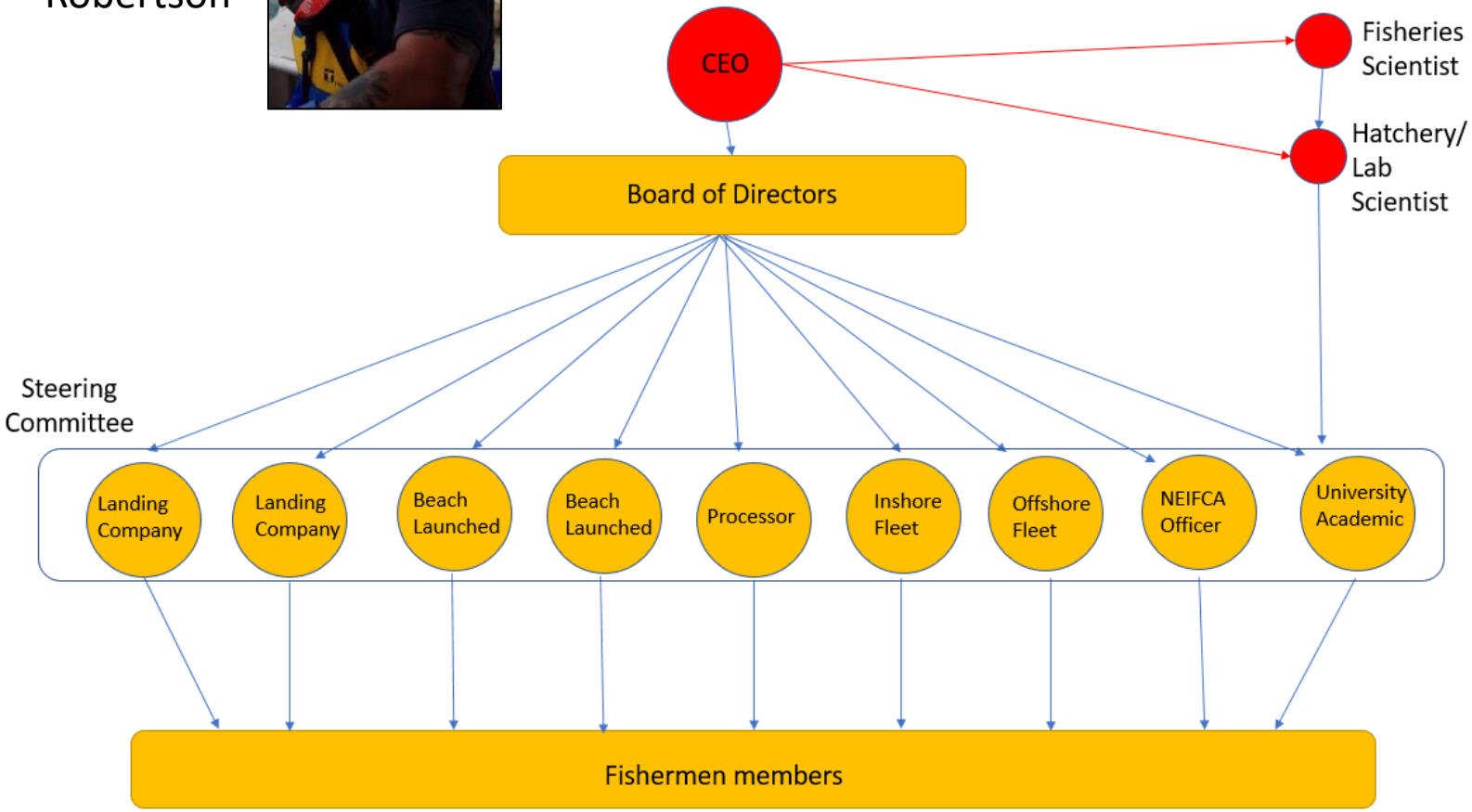
m.roach@hfig.org.uk

Holderness Fishing Industry Group

Holderness Fishing Industry Group

Jamie Robertson



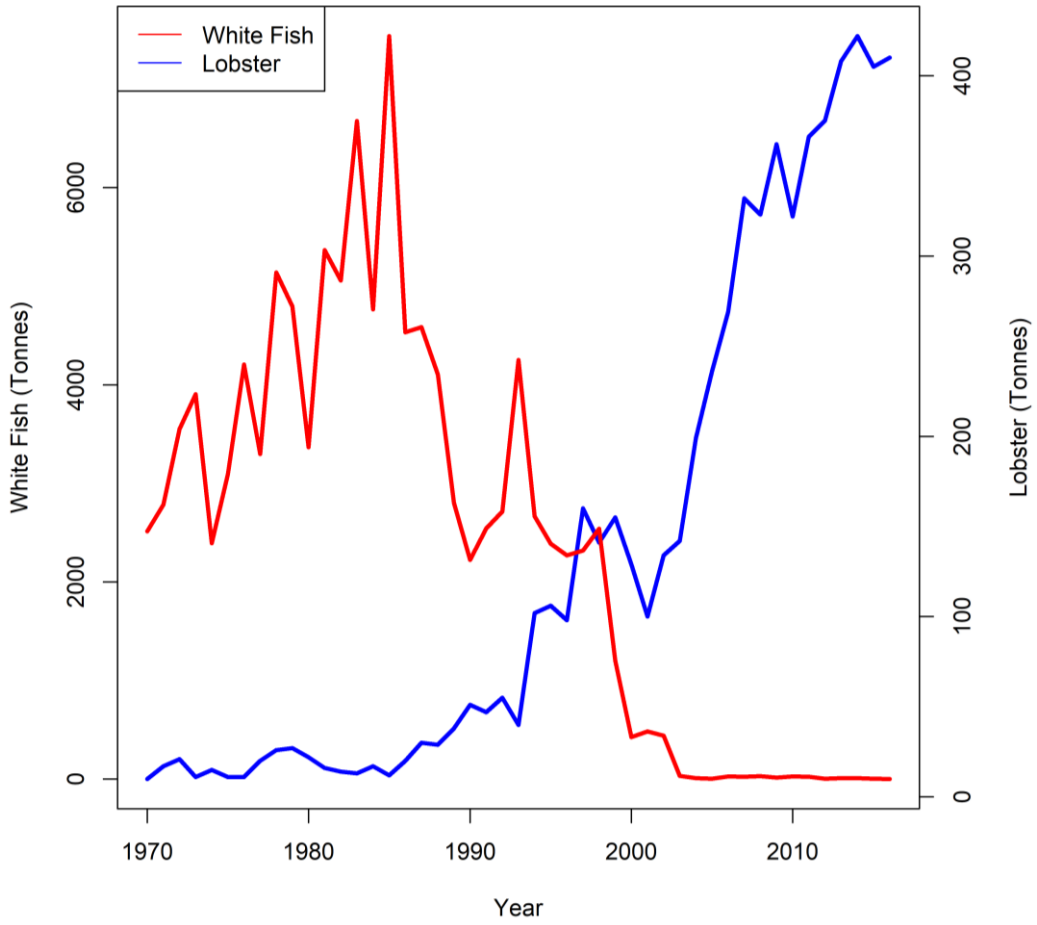


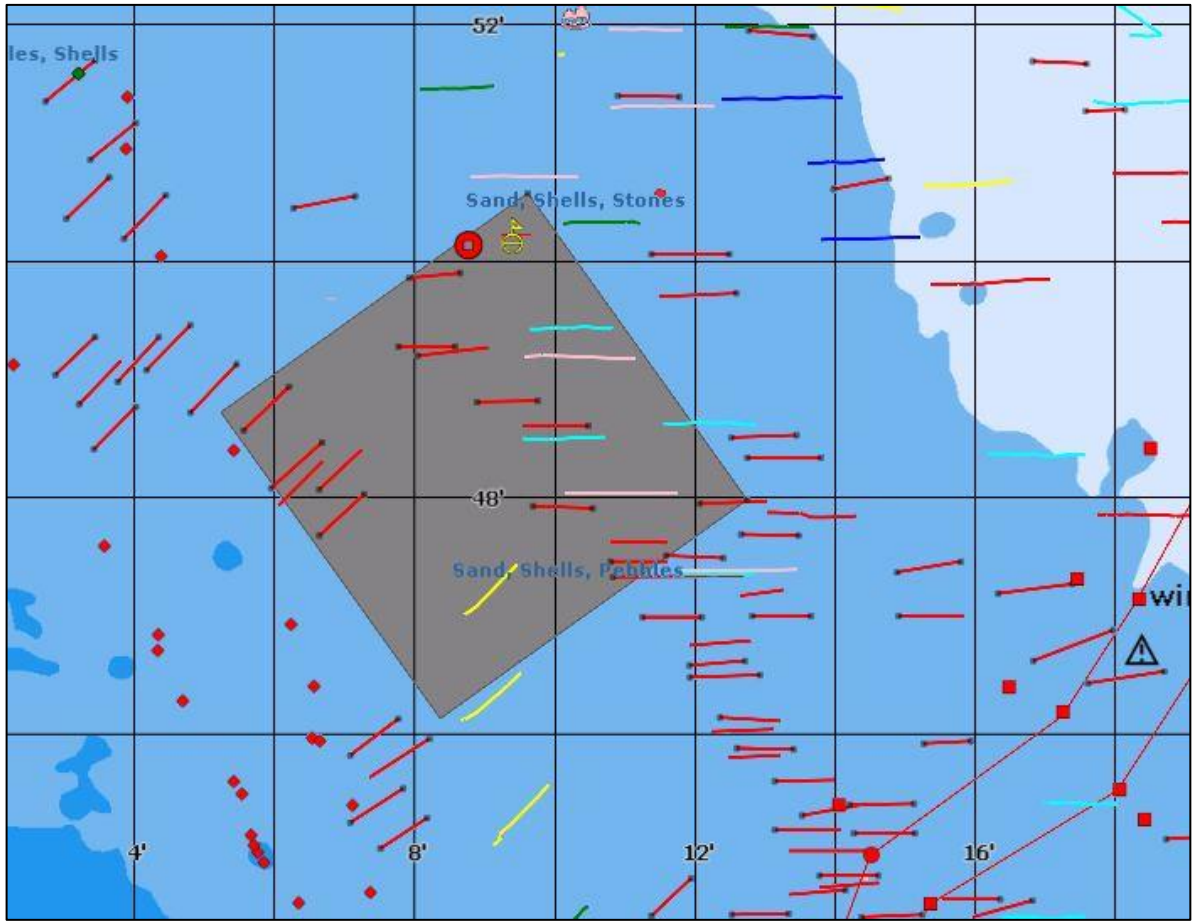
Dr Mike Roach

Dr John Terschak

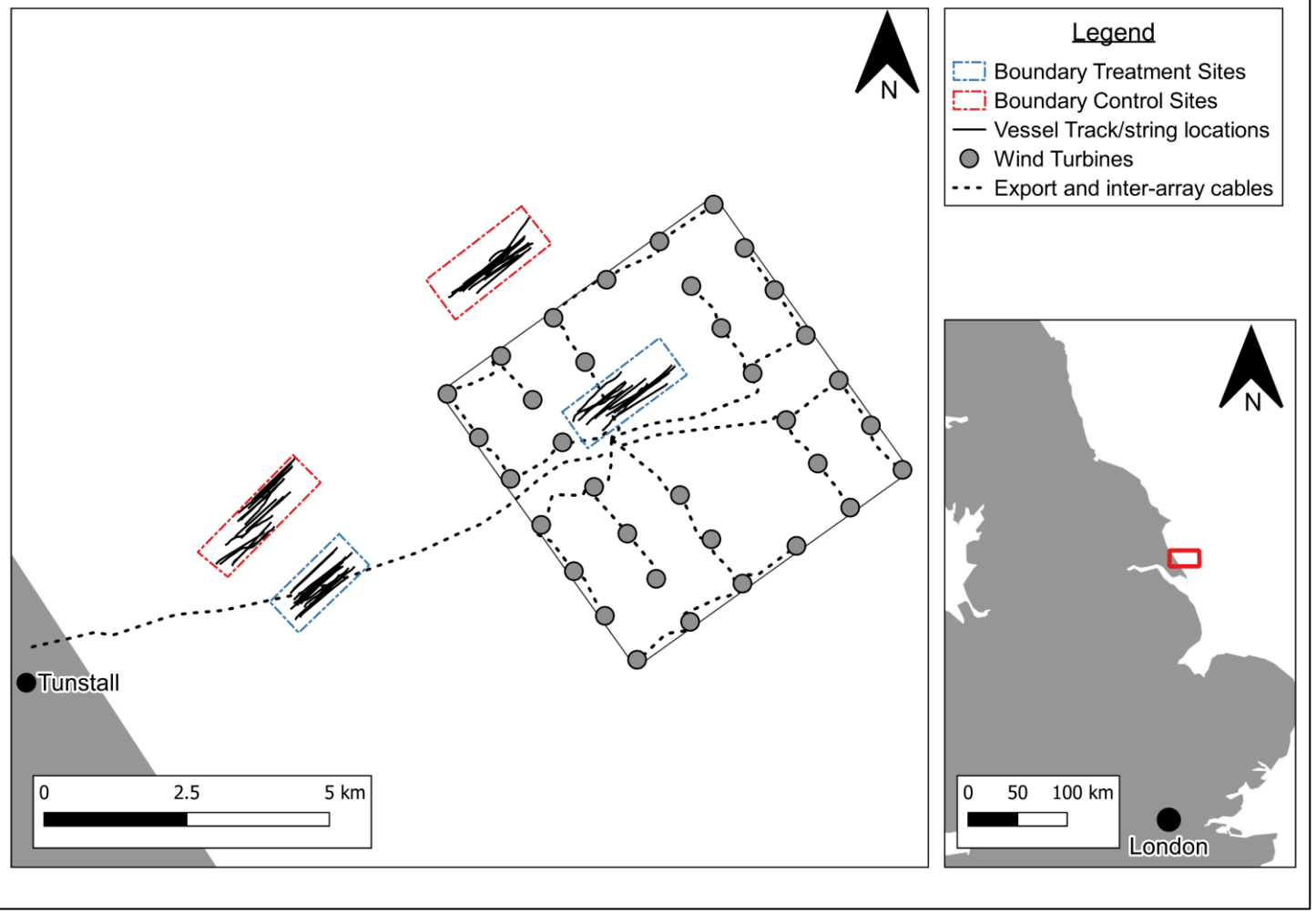
Holderness Fishing Industry Group

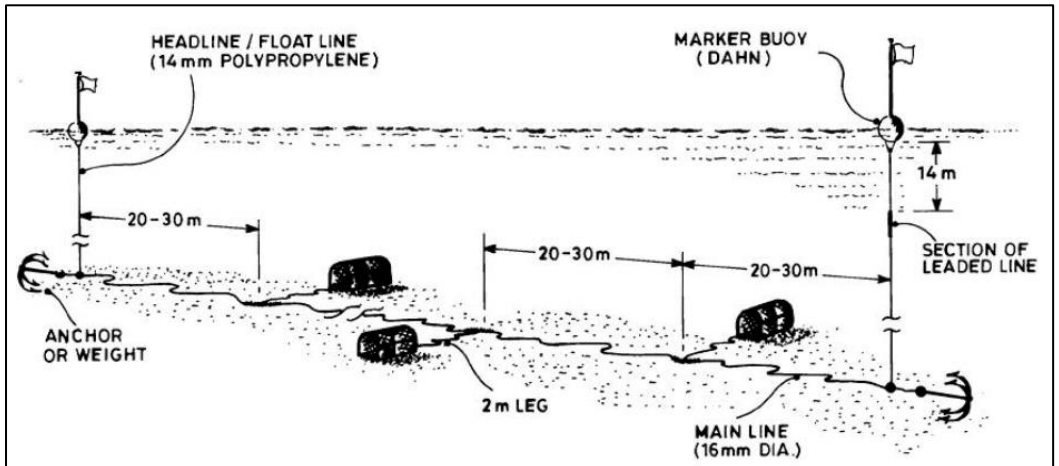
Holderness Fishing Industry Group





Study site and methodology



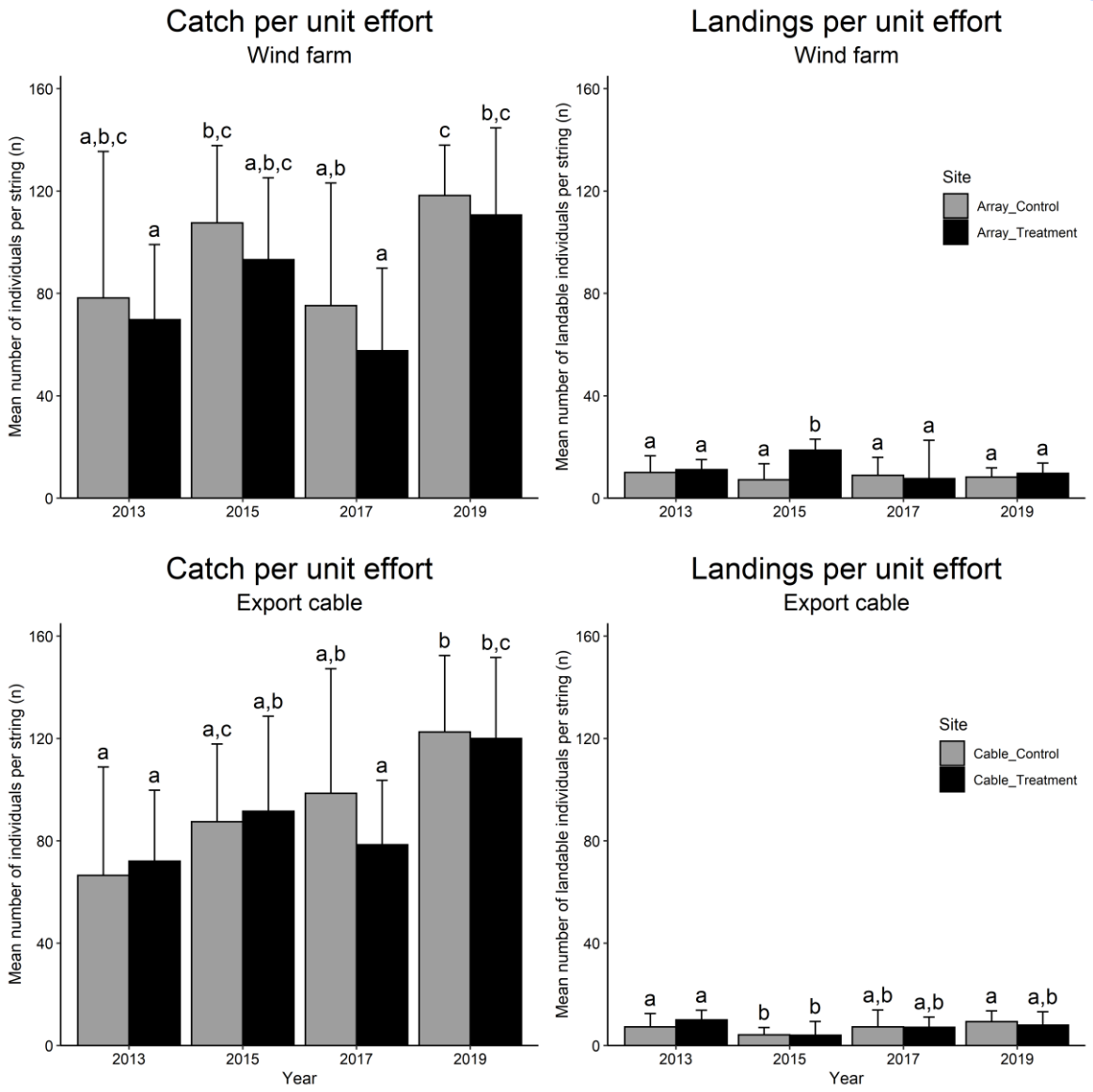


Results overview

- 6 year time period
- 4 survey years: 2013, 2015, 2017 and 2019
- 4 survey sites
- 9718 pots hauled over 81 survey days
- 74,606 commercial shellfish species recorded (28,113 lobsters)
- Main focus of the study was the more economical lobster fishery

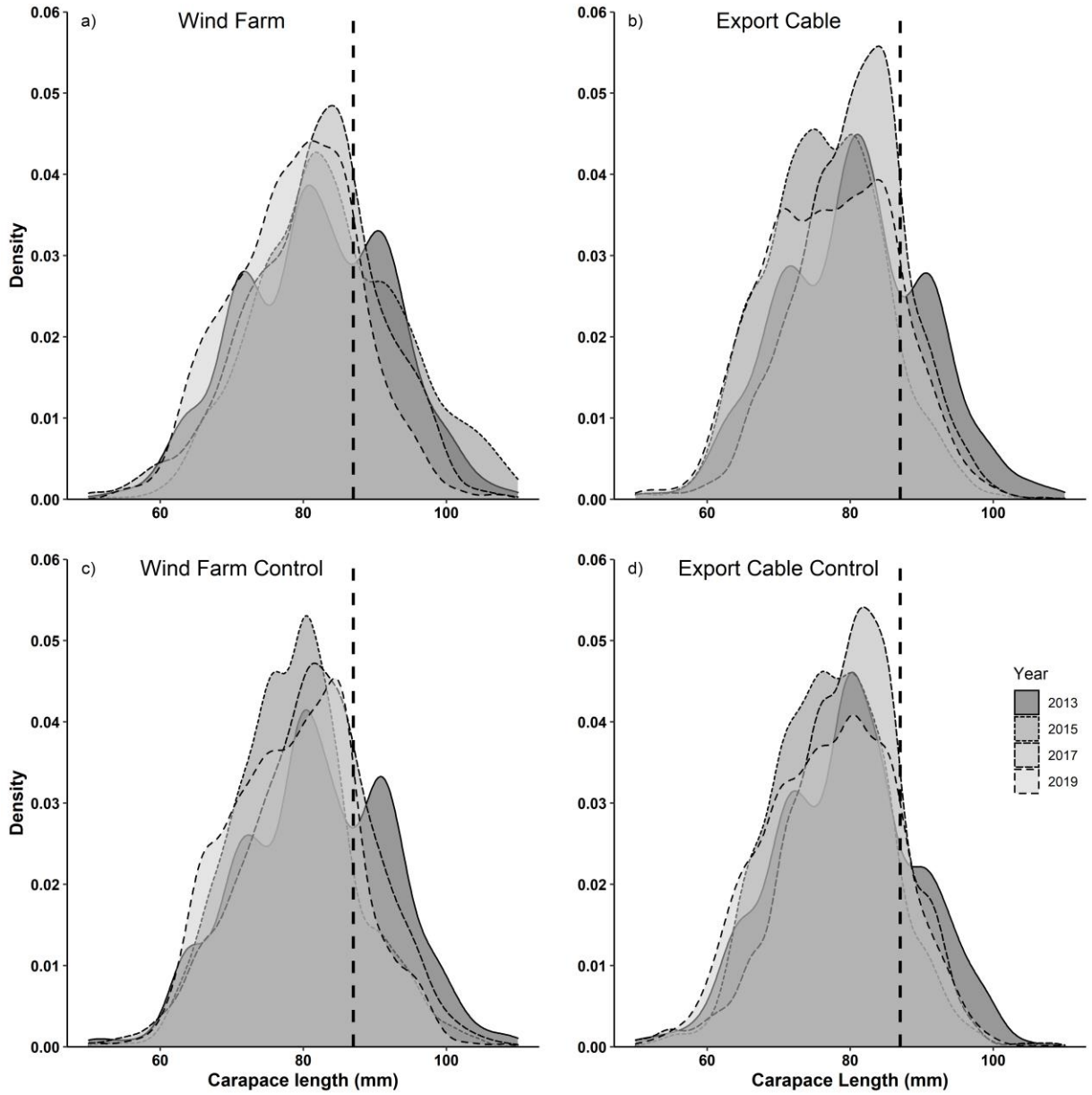
Catch statistics

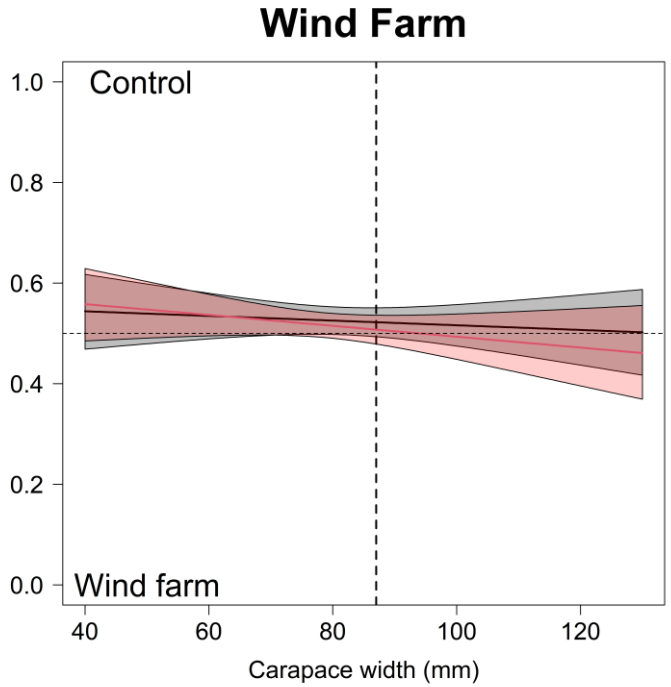
- Average catch rates increased across all sites over time
- Economic return (landings)remained stable with the exception of the wind farm in 2015 (closure effect)
- **No significant difference in catch rates or landings between the wind farm or export cable and their associated control sites *(exception of landings for 2015: wind farm closure effect).***

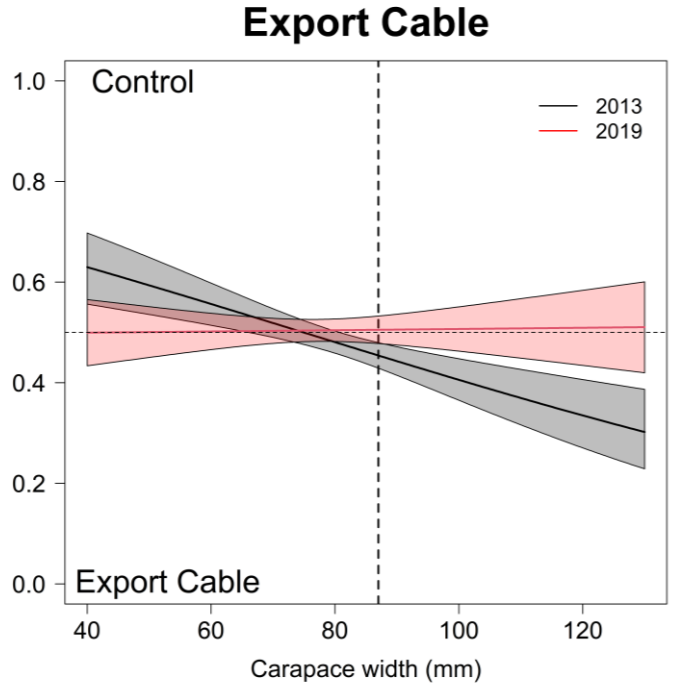


Wind farm closure effect discussed in Roach et al., (2018)

Size structure







Summary

- The fishery did not want the wind farm initially.
- The fishery has adapted to the presence of the wind farm and fish there daily with the site still being productive.
- The fishing industry led research, has shown no detrimental effects over 6 years.
- The fishery has benefited from the relationship developed with Ørsted.
- The wind farm is becoming a key site into understanding the interaction between offshore wind energy and crustacean fisheries.

Thankyou for listening

Email: m.roach@hfig.org.uk
www.hfig.org.uk

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Holderness Fishing Industry Group

Yorkshire Marine Research Centre

Haggett, C., ten Brink, T. S., Russel, A., Roach, M., Firestone, J., Dalton, T., and McCay, B. J. 2020. Offshore Wind Projects and Fisheries: Conflict and Engagement in the UK and the US. Oceanography.

Roach, M., Cohen, M., Forster, R., Revill, A. S., and Johnson, M. 2018. The effects of temporary exclusion of activity due to wind farm construction on a lobster (*Homarus gammarus*) fishery suggests a potential management approach. ICES Journal of Marine Science.

Roach, M. 2019. Interaction between the Yorkshire coast static gear crustacean fishery and offshore wind energy. PhD Thesis. University of Hull

Roach, M., Revill, A. S., and Johnson, M. 2020. Co-existence in practice: a six-year collaborative study of the effects of the Westermost Rough offshore wind development on Europe's largest lobster (*Homarus gammarus*) fishery. (Under review).