ICES CM 2016/G:329

Does temporary closure of lobster (*Homarus gammarus*) grounds due to windfarm construction highlight a new approach to management of crustacean stocks?

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Offshore wind farms (OWF) form an important part of the UK's strategy for responding to the threat of climate change. Their construction at locations around the UK's coastline highlights an urgent need to understand their impacts on commercial fisheries. The Westermost Rough OWF consists of 35, 6MW turbines covering 26 km^2, constructed during 2014/15 off the north east coast of England. Situated on a rock/coble substrate that supports a nationally important crustacean fishery. To address data deficiencies in the understanding of the impacts of OWF construction on the *Homarus gammarus* fishery, we investigated the potential utility of windfarms for management. The site was closed to commercial fishing for 20 months during construction. Sampling took place prior to the site being re-opened to fishing and for 6 weeks afterwards. This study investigated economic and ecological impacts to the fishery of having an area closed and then reopened for commercial exploitation. Catch per unit effort dropped immediately post opening, however landings per unit effort remained the same post opening of the site. Lack of fishing pressure during the construction phase allowed the previously targeted animals to contribute to the spawning stock, without being subjected to fishing disturbance. Re-opening the site allowed the fishery to recuperate some of the financial loss during the closure, which in turn offsets some of the negative effects associated with no take zones. We suggest that closure due to OWF construction has highlighted the potential for commercial lobster fisheries to benefit from periodical closures of particular areas.

Keywords: *Homarus gammarus*, crustacean, fisheries, offshore wind farms, management

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