

7 MARINE FISH

7.1 INTRODUCTION

There are two components of the marine fish monitoring for FEPA reporting purposes: analysis of annual CEFAS trawl surveys and consultations with local fishermen.

The CEFAS trawl surveys (fixed stations shown in Figure 7.1 below) have followed a consistent sampling protocol since 1989 and provide a useful baseline with which to examine temporal trends in the relative abundance of demersal fish. Relative abundance varies to a high degree naturally; indeed, indices of mean annual Catch Per Unit Effort (CPUE) for many species are likely to have high variance, and so only extreme impacts would indicate significant change, whereas more subtle impacts may be within the natural levels of variation and so remain undetected. However, the examination of temporal trends in the relative abundance of demersal fish in the south eastern Irish Sea should be a useful method for determining whether or not any major changes have occurred on a broader scale.

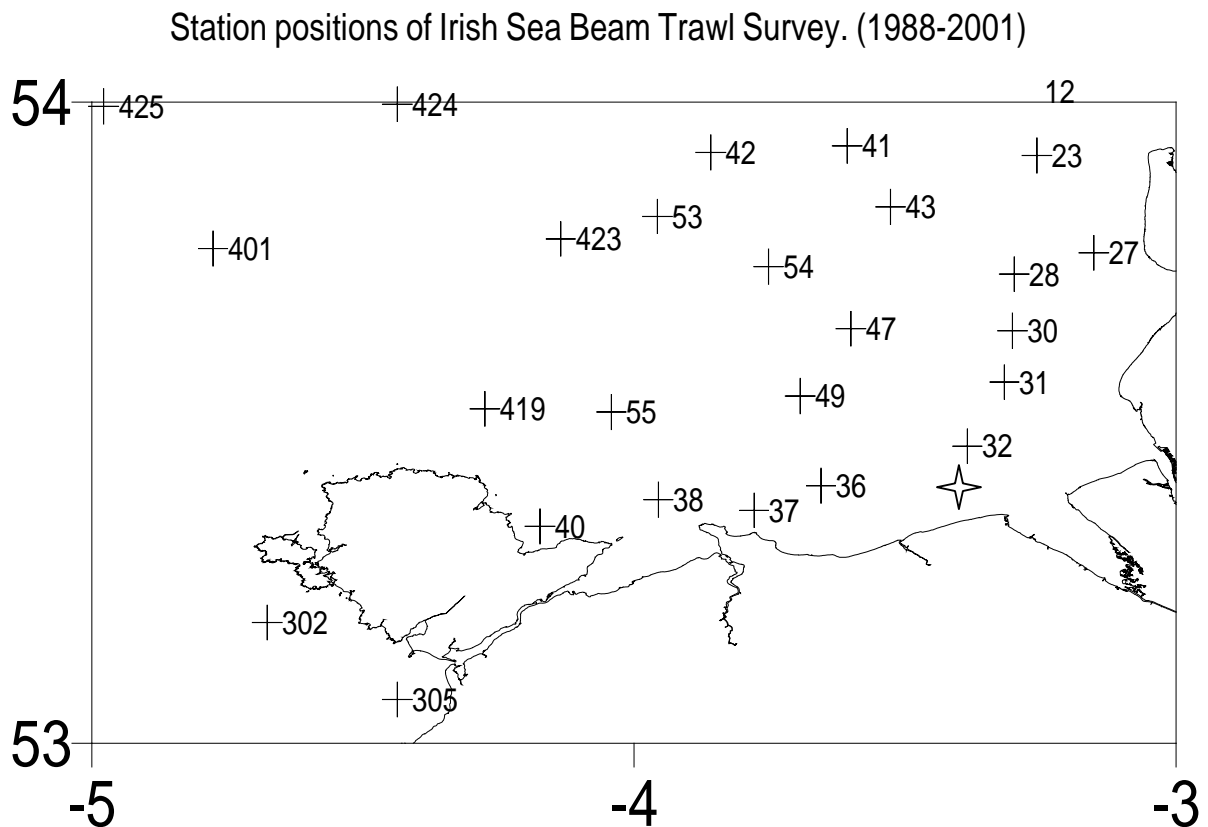


Figure 7.1 Stations as described in 2001 report. These apply to the current CEFAS report.

7.2 CONSULTATION/CANVASSING OF LOCAL FISHERMEN

In preparing the monitoring proposals, the views of CEFAS, CCW and local fisherman from Conwy to Fleetwood shall be sought through interviews/consultation as described in Section 9.7 of the FEPA Licence. We would continue to consult with the NW Sea Fisheries Committee and the SW England beam trawl industry on this issue. This consultation has been and shall continue to be carried out in collaboration with the Fisheries Liaison Officer.

Fishing activity within Liverpool Bay, and around the North Hoyle wind-farm site in particular, was reviewed during the preparation of the North Hoyle Wind Farm Environmental Statement (NWPO, 2002). The review established that there were only three under-10 m registered fishing vessels that routinely worked in the immediate vicinity of the wind-farm site but other vessels, including the occasional itinerant over-10 m vessel, fish within a few miles of the site.

The contacts made during the preparation of the environmental statement have been maintained and the network of contacts expanded as part of the on-going liaison and consultation process. Throughout the period of construction of the North Hoyle wind farm, April 2003 – April 2004, the consultation has involved face-to-face meetings and, or correspondence with 16 individual commercial fishermen who work in or around Liverpool Bay, 17 commercial and recreational fishermen's organisations, including three producer organisations whose members fish the Irish Sea, and two of the national fishermen's federations. The fishery enforcement officers (DEFRA and North Western & North Wales SFC) with responsibilities for the area were also consulted and kept informed.

A specific round of telephone calls and dockside visits, e.g. Conwy, Rhos on Sea, Rhyl and Fleetwood were made in the early phase of construction work to reinforce the message that there is a project fishery liaison advisor to whom the industry can turn if they wish to make a complaint or receive further information. Only two adverse reports were received throughout the year.

The net-fishermen who regularly work in the immediate vicinity of North Hoyle thought that perhaps their (ray) catches were slightly down compared to the previous year or so, but no more so than they have experienced as normal inter-annual variation in catch rates. More specifically, one of the netters thought that early season catches were down due to the presence of a 'grey slime' that festooned the nets. Although he would have liked to link it to the construction work he recognised that it was more probably some form of unrelated plankton bloom, not least because it appeared to die away before construction work was completed. Even when foundation pile drivers were in operation, these net-boat skippers followed established practice and fished within 2 miles of the North Hoyle site at the start and end of their netting season April-September).

Another commercial fisherman who works bass gill-nets close inshore (ie less than a mile from the beach) between the River Clwyd and Prestatyn reported that 2003 was his worst season (May-July) in over 10 year's fishing the area. The same skipper, however, commented that it had been an exceptionally good start to mackerel fishing in the area. As this species is no less prone to move rapidly from adverse conditions than bass or any other species, the apparent abundance of mackerel suggested that the lower than average bass catch rates were not necessarily due to construction work. Nevertheless, details of the fisherman's past catch and earnings were passed to NWP Offshore Ltd to consider his claim for compensation.

Occasional stories were heard of dead fish being seen in the vicinity of the turbines during pile driving but it was never possible to obtain a specific name or contact number to follow-up and ascertain how extensive the problem might be. It is recognised that if pile-drivers have been silent for some hours there is always the possibility that some fish will move back into the work area. Any that are in very close proximity (less than 5 m) to a foundation when a pile driver strikes is in danger of suffering fatal damage which is why all such pile driving should commence with 'tapping' to drive fish away. Overall, there was no evidence that there was any significant fish mortality attributable to the pile-driving operations. In the final stages of construction, however, there were anecdotal reports of work-boat skippers beginning to make

rod-and-line catches of whiting and flatfish around the turbines as they were hove to awaiting instructions.

The only other adverse reports received during the year related to interaction between the construction site work-boats and fishing vessels. Inevitably, locally based under-10 m trawlers felt aggrieved that work boats instructed them to keep clear of the site but they recognised that this was for reasons of safety. It is too soon to say whether these skippers will resume trawling through the North Hoyle site now that construction is finished.

More specifically, a Mostyn-based vessel working within the Dee Estuary complained to the Mostyn Harbourmaster following incidents when North Hoyle work-boats passed close by at great speed. As a result, the harbourmaster issued a local 'notice to mariners' since when there has not been a repetition.

The Welsh Federation of Sea anglers canvassed the experience of clubs that fish the area regularly and reported that none of their members had noticed any adverse effects.

In conclusion, it would appear that the construction phase of the North Hoyle wind-farm project has not had a significant, if any, effect on marine fish or fishing in the area. Whether or not this phase of construction has affected migratory species (salmon, sea trout and European eels) in the River Clwyd (or Dee) is too soon to tell. The smolts from the 2003-4 spawning season will not emigrate for at least two years and it will be another full year (ie 2007 at the earliest) before any of them return to spawn. Only then will it be possible to start looking objectively to see how numbers may have been affected by events.

7.3 CEFAS SURVEYS

Results from regular demersal fish surveys carried out by CEFAS in the Eastern Irish Sea have been summarised by CEFAS (report provided as Appendix 7.1). This report focuses on results of 4m half hour beam trawls carried out at "prime Site 32", which lies several km to the north east of the North Hoyle wind farm (precise location not specified by CEFAS). The surveys are carried out annually in the autumn. The most recent data are from autumn 2003, which is during the construction period for the wind farm, though after the installation of all of the monopiles.

The intended use of the CEFAS report in relation to the wind farm is as a baseline for future monitoring. Identification of any possible effects of the construction activities on the demersal fish would be virtually impossible, save for effects of an extremely large magnitude, since the data is from a single location on a single occasion, and the station is somewhat removed from the wind farm. In future years, once further data is available, it should be possible to make more meaningful analyses of trends, though the power to detect changes attributable to the wind farm will always be low. For these reasons, discussion of the results here is necessarily very cursory.

Catch per Unit Effort (CPUE) data are presented, as no of fish per hour, at prime site 32, at all stations fished, and at all stations where each species was caught, for each of 17 major fish species. These were the flatfish dab, sole, solenette, plaice and scaldfish; the gadoids cod, whiting, bib and poor cod, the elasmobranches lesser spotted dogfish, spotted ray and thornback ray, together with dragonet, pogge, lesser weever, tub gurnard and grey gurnard. These species represent >95% of the fish assemblage at North Hoyle Prime site 32 by numbers. They were selected either because they were abundant, commercially important, of conservation importance, or considered useful indicators for monitoring change.

Bearing in mind the limitation outlined above, the CPUE data nevertheless suggest no major deviations in demersal fish populations in autumn 2003. Thirteen of the seventeen species were caught in numbers which were within the ranges for the previous five years. The exceptions were:

- Dab (CPUE more or less double that of the previous 5 years, but was caught in higher numbers in 1996).
- Plaice (Highest CPUE so far recorded for this site, but in keeping with the trend for the whole of the eastern Irish Sea).
- Scaldfish (Highest CPUE so far recorded for this site, again in keeping with the trend for the whole of the eastern Irish Sea).
- Pogge (CPUE very marginally increased compared to the last five years but lower than in the early 1990s, and again appears to closely follow trend for the Eastern Irish Sea).