

# **Fisher's North Sea Stock Survey**

## **Some Remarks**

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### **Background**

The Fishers' North Sea Stock Survey has been carried out annually since 2003 (following a pilot in 2002) with the aim of making fishermen's knowledge of the state of fish stocks available to fisheries scientists and fisheries managers. The questionnaire-based survey collects information on vessel size and fishing gear type, on the status of key fish species, and on economic circumstances.

Completed questionnaires are collected by national coordinators in each participating country, and the information entered by them into a database. The NAFC Marine Centre - with funding from the NSRAC - has collated and analysed these data each year, and prepared an annual report. I undertook the collation, analysis and reporting of the data in 2009 (in place of Chevonne Laurenson).

This paper offers some observations, comments and suggestions on the survey.

### **Uses of the Data**

It might be beneficial to review how the results of the survey are used, and by whom, i.e. what is the data collected for?

Similarly, it might be useful if ICES were to confirm how they make use of the data, and the extent to which they influence their assessments. It might also be helpful to get some feedback from ICES on what data they actually make use of, and if there are any additional data they would find useful.

It is not clear that any use is made of the economic data that is collected.

Are there any other organisations that could or should make use of the information collected? Should the information be more widely distributed (see also below)?

It is suggested that it is important for fishermen to see the 'value' of the survey, i.e. that the information they have provided is being used.

## **Outputs**

What output(s) are required from the survey? Traditionally the results have been summarised in a report (in 2009 this ran to almost 150 pages), but is this the most appropriate format? If ICES simply require certain data those can be passed directly to them.

How widely (and to whom) should the results and/or report of the survey be circulated? Is there a need to make more use of the results of the survey, e.g. to circulate them to fishermen, publicise them (e.g. in *Fishing News* and similar publications), etc.? These would probably require output in a different form than at present.

Would it be worth considering a web-based approach, where graphs, maps and data are published online for people to look up, rather than being compiled into a single document? In theory it might be possible to develop an interactive system that allowed users to select exactly the information they wanted (e.g. nationality/area/vessel size/fishing gear/species).

Is it sufficient to allow users simply to access the results? How much description or interpretation are required?

## **Timing**

The timing of this survey no longer fits with the schedule of ICES working group meetings. The results of the survey are now produced too late to be incorporated into the same year's assessment process.

Should the timing of the survey be changed so that the results can feed into the ICES process the same year? ICES would need to advise of when they would need the results and the survey then planned around that deadline.

One option might be to move the survey to the early part of the year (say January / February). This would have the additional advantage that fishermen could be asked

to compare the previous two calendar years (the existing survey asks them to compare the first half of this year with the first half of last year).

This could be achieved by delaying the next survey until (say) January-February 2011, to compare 2010 with 2009.

## **Methodology**

In 2009 a new system was developed that allowed national coordinators to enter data directly into an online database. The final report was also made available for download from the same website.

Despite some initial problems (apologies to those affected) this system worked well from my perspective. What did the national coordinators think? Should this system be retained, or expanded?

Would it be desirable to consider developing a system that allowed fishermen to complete the questionnaires directly online? Would fishermen be more or less likely to do this than to complete and return a paper questionnaire?

## **Scope**

The current survey covers five nations, eight species, and the North Sea only.

Suggestions have been made from time to time that the survey should be extended to cover more nations, more species (e.g. megrims) and/or a larger area (e.g. W. of Scotland).

## **Information Collected**

Is there a need to add to, or change the information collected? Or to stop collecting some information?

One disadvantage of the existing survey is that it only provides information on perceived changes; but not about absolute levels. So it might tell us that fishermen think there are more cod this year (for example), but not whether they actually think cod are scarce or abundant. There might be merit in expanding the survey to collect information about perceptions of scarcity or abundance, as well as changes.

## **Further Data Analysis**

Over the last seven years, the survey has collected a substantial amount of information. It has not been possible to fully analyse all these data within each year (e.g. to explore all the possible permutations of species, area, fishing gear, vessel size and nationality), and there has been little opportunity to analyse the data in detail between years.

There might be merit in undertaking a more detailed analysis of the data collected since the survey started. This would have to be additional to the regular, annual data collation and analysis exercise.

## **Return Rate**

The number of questionnaires returned is relatively small and has declined significantly in recent years (216 valid returns in 2009).

This decline has not been equally distributed across all participating countries, but has particularly affected returns from Denmark, the Netherlands (exc. flag ships) and, especially, Scotland. The reasons for this decline are not known; in particular whether it is caused by declining faith in the value of the survey itself, or by other factors.

This uneven decline will have shifted the balance of responses, certainly between areas and possibly between target species, fishing gears and vessel sizes. In particular, it has probably resulted in a greater proportion of responses from southern areas of the North Sea, and a smaller proportion from northern areas.

If the survey is to continue to be useful it would be highly desirable to increase the number of returns and to reverse the decline in some areas.

## **Resources and Planning**

It is acknowledged that many of the suggestions made above would increase the amount of work required to carry out the survey, and thus the resources required. Some of the ideas proposed would require significant time and/or resources to develop, test and implement.

If it were possible it might be desirable to consider some longer-term planning and/or resourcing of the survey, in particular to allow more time for preparation and organisation. This would be especially true if there were to be any significant changes to the survey or the survey methodology (e.g. development of a full online system).

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