

Living Resources Committee (G) and Resource Management Committee (D) – Joint Session on Surveys

Chair: Carl M. O'Brien (UK)

Rapporteur: Dave Reid (UK)

The Joint Session on Surveys met on Tuesday 21 September from 14:00 to 18:00. 30 participants attended the meeting.

Opening

The Chair opened the meeting, welcomed the participants and the Rapporteur was appointed. The Chair outlined the agenda and timetable for this single session of joint Committee business. These were adopted without modification.

Presentation and adoption of reports and draft Resolutions

Baltic International Fish Survey Working Group [WGBIFS]

The Chair of WGBIFS, Rainer Oeberst (Germany) presented Doc. G:08. The Group was able to meet all their ToRs this year. As requested by the Chair of LRC the report concentrated on areas where there were possible needs for improvement. The surveys were completed mostly as specified, although small areas in the Kattegat and the Gulf of Finland were missed. The main difficulties in the acoustic surveys lay in the rapid changes in the ratio of herring to sprat in the hauls, leading to difficulties in raising to rectangle. This problem was discussed at the meeting of WKSAD in Aberdeen (reported below), but apart from more hauls no obvious solution was found. In the trawl surveys, the main problems remained those of inaccessible grounds to fishing and the different gears deployed by national surveys. Inter-calibration especially for cod was difficult due to low stock abundance. The presence of anoxic bottom layers in some bays and basins was also a problem as the fish moved into the pelagic zone and became inaccessible. WGBIFS will continue to seek solutions to these problems.

Planning Group on North Sea Cod and Plaice Egg Survey [PGEGBS]

Mark Dickey-Collas (The Netherlands) presented Doc. G:03. This was the first attempt at a global coverage of this new survey and was remarkably successful, given the *ad hoc* nature of the vessel provision. Six nations eventually took part in dedicated or adapted surveys. It was possible to cover at least part of the survey area throughout the season, and to achieve a detailed and comprehensive coverage at peak spawning towards the end of February and the beginning of March. Analysis of samples is ongoing and will be completed for the Group's next meeting in 2005. The main problems encountered were bad weather and non-standardized sampling gear.

Working Group on Mackerel and Horse Mackerel Egg Surveys [WGMEGS]

The Chair of WGMEGS, Dave Reid (UK) presented Doc. G:10. During 2004 the Group worked by correspondence. A planned joint meeting with SGSBSA was not possible in 2004 due to other competing commitments. The results of the WKMHMES were considered and most recommendations relevant to the survey were adopted. A full planning document was prepared by the Chair and used by all cruise leaders during the surveys. Additional contact was maintained during the survey, allowing rapid response to immediate problems. The result was one of the best coverages achieved to date in the survey time-series. As scheduled, the survey analysis was fully complete by September 2004 and the biomass and egg production

data delivered to the WGMHSA. This is the first time this has been achieved in the survey year.

Working Group on the International Bottom Trawl Surveys [IBTSWG]

The Chair of IBTSWG, Jean-Claude Mahe (France) presented Doc. D:05. In general, the surveys were executed according to plan in 2004. There are still some standardisation issues, particularly with the GOV modifications by CEFAS in the first quarter survey and in the use of the MIK net. Additionally, there are some concerns over the relative performance of the GOV used by different nations. The Group planned for a switch to a full depth-stratified design in the western area, and a study is being carried out for the Celtic Sea and in the Irish area. Work on the DATRAS database is almost complete and it should be online via the ICES web site shortly. The question of data ownership and open access was raised again without solution. Quality assurance work on the IBTS database at ICES Headquarters is continuing.

Working Group on Beam Trawl Surveys [WGBEAM]

Guus Eltink (The Netherlands) presented Doc. G:04. The surveys involving four countries were carried out as planned. The Group has started work on improving the index calculation method from these surveys now that a reasonable time-series is available and following the outcome of the EU-funded projects MIQES and EVARES. The Group continued to work on the production of catchability criteria for this survey. However, the five different beam trawls used makes this a complex process. Beam trawl data from all the surveys are now incorporated into the new trawl survey database DATRAS, and will be available shortly. 11 specified epibenthic taxa are now included in the standard data collection protocol for these surveys. It is hoped that these can also be incorporated into DATRAS. Richard Millner (UK) will take over the Chair from Gerjan Piet (The Netherlands) from 2005.

Planning Group on Aerial and Acoustic Surveys for Mackerel [PGAAM]

As there was no representative from this Group, Doc. G:07 was neither presented nor discussed.

Planning Group for Herring Surveys [PGHERS]

Chris Zimmermann (Germany) presented Doc. G:05. Six acoustic surveys and three larval survey sets were carried out in 2003. The Group was responsible for working up the data and forwarding to the HAWG. No major problems were encountered. The Group is planning to move towards a fully integrated acoustic survey design in the near future. However, at present, concern about scrutiny standardisation prevents this. The 2004 survey has been designed to allow major overlap areas between vessels, especially in the important Shetland area. This should allow resolution of the scrutiny questions. A further scrutiny workshop will be held in 2005 and the overlaps evaluated. An exchange of maturity stage photographs was organised and these will be used to ensure harmonisation of maturity determination on the surveys. The HERSUR database for acoustic survey data is still being maintained by Denmark, and this will be enhanced to provide metadata to HAWG.

Planning Group on Northeast Atlantic Pelagic Ecosystem Surveys [PGNAPES]

The Chair of PGNAPES, Jan-Arge Jacobsen (Faroes) presented Doc. D:07. The surveys were carried out as planned in 2004 and the biomass estimates for Atlanto-Scandian herring and blue whiting produced. The Group also provided estimates of the zooplankton abundance and distribution as well as CTD profile data. The Group described the migration pattern of the two fish species and the changes in these in recent years, as well as their relationship to the hydrography and zooplankton situation. This represents an important approach to the provision of integrated data, and should be seen as a model for other survey groups. In

addition, PGNAPES planned the surveys for 2005 and took measures to ensure standard survey practices and protocols.

Workshop on Survey Design and Data Analysis [WKSAD]

The Chair of WKSAD, Paul Fernandes (UK) presented Doc. B:07. The workshop carried out a comprehensive review of survey design methods and analysis and agreed to adopt Cochran's 11 steps as a guide to good practice. It considered a range of survey methods including trawl, acoustic, ichthyoplankton, and TV. It also addressed questions such as random versus fixed designs, stratification, abundance and variance estimation, as well as final application of data. Some survey-specific issues were identified such as tow length, use of trawls in acoustic surveys, and others. The tendency to have entrenched and model-based approaches was identified as a problem, as well as the weakness in reporting estimation procedures and precision. An agreement was reached on the best practice designs, and identified systematic sampling or stratified random sampling rather than simple random sampling as the best approach. The workshop agreed that it was desirable to incorporate ancillary data where this was of good quality, and to expand the use of fishers in future survey work. The importance of inter-calibration between vessels was recognized.

Any other business

There had been full and frank discussions of the reports at the end of each presentation and the need for further general discussion was not necessary. Participants in the session, and the presenters, found the session invaluable and proposed that the session be scheduled for the next ASC in 2005.