

2018 Resolutions for publications (Category 1)

| | | |
|----------|--|----------|
| 1 | Resolutions for CRR publications..... | 2 |
| | Report on Effect of tow duration on catch rates and species richness in the North Sea and Northeast Atlantic IBTS..... | 2 |
| | Report on Collecting Quality Underwater Acoustic Data..... | 3 |
| | Report on Integrated Ecosystem Assessment of the Central Arctic Ocean: ecosystem description and vulnerability characterization..... | 4 |

1 Resolutions for CRR publications

Report on Effect of tow duration on catch rates and species richness in the North Sea and Northeast Atlantic IBTS

2018/1/EOSG01 A report on **Effect of tow duration on catch rates and species richness in the North Sea and Northeast Atlantic IBTS**, created by members of the IBTSWG and edited by Kai Wieland (Denmark), Finlay Burns (Scotland) and Erik Olsen (Norway) comprising a collation of IBTS work will be published in the ICES Cooperative Research Report series. The estimated number of pages is 200.

The editors agree to submit the final draft of the proposed publication by 31 December 2019.

Supporting information

| | |
|---|---|
| Priority: | The proposed Cooperative Research Report will compile and synthesize research results on the effect of tow duration collected during recent IBTS surveys. It complements and synthesizes information which is currently distributed in various Working documents and IBTS WG reports with results from the most recent surveys in the 3 rd and 4 th quarter 2018 and in the 1 st quarter 2019. Major aspects are a comparison of short (15 min) tows with tows of the standard duration of 30 min, fishing times outside the nominal tow duration and results of so-called zero-minute tows. It is expected that the results will give the basis for decisions on tow duration in future surveys in general and whether a reduction and in which way this can be implemented if overall effort reduction for fish monitoring in the IBTS becomes unavoidable without impairing the quality of the survey results and maintaining consistent input for stock assessments and MFSD indicators. |
| Scientific justification: | The IBTS provides input for stock assessments of a variety of species and provides information for MFSD indicators. The IBTS is standardized but an increasing work load for sampling additional ecological information may make it necessary to reduce the effort for the standard fish abundance monitoring because it is unlikely that total survey time can be increased. |
| Resource requirements: | No analytical resources are required from ICES. |
| Participants: | All members of the IBTSWG would be involved in assembling and writing the report. |
| Secretariat facilities: | About one month of the services of Secretariat Professional and General Staff will be required. |
| Financial: | Publication costs. |
| Linkages to advisory committees: | This report will be relevant to all assessment WGs using IBTS data (e.g. WGNSK, HAWG) and SCICOM. |
| Linkages to other committees or groups: | It is expected that the CRR will be of interest to a range of end-users both within ICES and outside. |
| Linkages to other organizations: | National laboratories and Universities involved in survey design issues inside and outside the ICES area. |

Report on Collecting Quality Underwater Acoustic Data

2018/1/EOSG02 A report on **Collecting Quality Underwater Acoustic Data**, edited by members of TGQUAD and other colleagues (WGFAST), and comprising a review of the impact of inclement weather on acoustic data quality, descriptions of methods for diagnosing and assessing data quality, and recommendations for acquisition and analysis of acoustic data collected during inclement weather conditions, will be published in the ICES Cooperative Research Report series. The estimated number of pages is 150.

The editors agree to submit the final draft of the proposed publication by 31 December 2020.

Supporting information

| | |
|---|--|
| Priority: | The proposed Cooperative Research Report presents a review and synthesis of knowledge, methods for diagnosing and assessing data quality, and recent research results on the effects of inclement weather on underwater acoustic data quality. The report aims to disperse the findings, extensively and comprehensively updated, of the Collecting Quality Underwater Acoustic Data Topic Group to the wider community. |
| Scientific justification: | <ul style="list-style-type: none">• Acoustic surveys provide crucial information for the stock assessments of pelagic species and the wider pelagic ecosystem, and these activities are considered to have high priority. Survey time and vessel availability is limited so data are collected during sub-optimal conditions. Diagnosing and evaluating data quality is crucial for incorporating data into stock assessments.• The availability of methods to diagnose and assess data quality, objective rationale for deciding when to suspend data acquisition, and methods to analyze data collected during inclement weather is relevant to institutions that rely on acoustic data for abundance estimates and ecosystem-based management. |
| Linkages to advisory committees: | The CRR will address data quality, which is critical to the advice provided by ACOM. In addition, fisheries acoustic data are important monitors of ecosystem components relevant to IEA. |
| Linkages to other committees or groups: | It is expected that the CRR will be of interest to a range of end-users both within ICES and outside. Within ICES, all groups currently planning and implementing acoustic surveys or using acoustic survey data such as WGIPS, WGACEGG, and WGBIFS will directly use the CRR for their data acquisition and analysis. |
| Linkages to other organizations: | In addition to their links with WGFAST, this CRR is international interest to all countries and fisheries institutions conducting acoustic biomass estimation surveys. |
| Draft outline of publication: | See draft table of contents below, which includes overviews of each chapter. |
| Resource requirements: | Colour illustrations of acoustic data and analyses are included |
| Participants: | Members and editors aim to complete revisions following referee comments and final compilation of the bibliography during the remainder of 2020. |
| Secretariat facilities: | About one month of the services of Secretariat Professional and General Staff will be required |
| Financial: | Associated publication costs. |
| Promotion: | Detail future relevant events, meetings, or fora where ICES and the authors could promote the final publication. Include any additional promotional ideas from the authors. |

Report on Integrated Ecosystem Assessment of the Central Arctic Ocean: ecosystem description and vulnerability characterization

2018/1/IEASG03 The report **Integrated Ecosystem Assessment of the Central Arctic Ocean: ecosystem description and vulnerability characterization**, produced by the ICES/PICES/PAME Working Group on Integrated Ecosystem Assessment of the Central Arctic Ocean (WGICA) and edited by the co-chairs of WGICA (Hein Rune Skjoldal, John Bengtson, and Sei-Ichi Saitoh), will be published in the ICES Cooperative Research Report series. The estimated number of pages is 200.

The editors agree to submit the final draft of the proposed publication by 31 December 2019.

Supporting information

| | |
|---|--|
| Priority: | The proposed Cooperative Research Report is the first version Integrated Ecosystem Assessment (IEA) report produced by the joint ICES/PICES/PAME WGICA as an outcome of the first 3 years of work by the working group. It is not a full-fledged IEA but provides a description of the CAO ecosystem and some first and general considerations of vulnerability in relation to human activities and pressures. The ecosystem description provides a comprehensive summary and review of information and knowledge about the physical realm and biological compartments (plankton, ice biota, benthos, fish, birds, and mammals) of the CAO ecosystem, with emphasis on spatial aspects and trophic interactions. |
| Scientific justification: | IEA is a core element of the Ecosystem Approach to management, and ICES has established a number of regional working groups to carry out IEAs for e.g. the North Sea, Baltic Sea, Norwegian Sea, Barents Sea, and more. WGICA was established by ICES jointly with PAME (the Protection of the Arctic Marine Environment working group of the Arctic Council) in autumn 2015, and PICES later joined as a co-parent organization from 2017. The proposed Cooperative Research Report is the main product from the work by WGICA in the 2015-2018 period. |
| Linkages to advisory committees: | WGICA reports to IEASG, which is overseeing the IEA work and is linked to both the science and advisory sides of ICES. |
| Linkages to other committees or groups: | It is expected that the CRR will be of interest to a range of end-users both within ICES and outside. There is currently much interest in the Arctic Ocean and the changes which are taking place there. One aspect is the potential for future fisheries when the Arctic Ocean opens up with little or no summer ice in the (relative) near future. |
| Linkages to other organizations: | The report is a joint report of the three parent organizations – ICES, PICES, and PAME – and it will be made known and available for distribution also in PICES and PAME. |
| Draft outline of publication: | <ol style="list-style-type: none"> 1. Introduction (background, scope, geographical area) 2. Overview of the CAO (key ecosystem features, Atlantic and Pacific gateways) 3. Description of the CAO ecosystem <ol style="list-style-type: none"> a. Geography and bathymetry b. Climate, oceanography and sea ice c. Phytoplankton, ice algae and primary production d. Zooplankton and ice fauna e. Benthos f. Fish g. Birds h. Marine mammals 4. Vulnerability characterization (concept of vulnerability, how to address vulnerability, overview of human activities and pressures) 5. Knowledge gaps (in relation to next round of IEA) |

| | |
|-------------------------|--|
| Resource requirements: | Colour illustrations with photos of species, maps, and schematics (e.g. sections through basins, seasonal patterns of ice and production, food web linkages, a.o). |
| Participants: | Editors will work with chapter leads and members of the working group to prepare chapters and the complete report for submission and final technical editing and production by ICES. |
| Secretariat facilities: | About one month of the services of Secretariat Professional and General Staff will be required |
| Financial: | Associated publication costs. |
| Promotion: | The report will be announced and displayed at annual meetings of ICES, PICES, and PAME/Arctic Council. A joint press release from ICES, PICES and PAME should be made when the CRR is published and available. |
