WGMEGS - Working Group on Mackerel and Horse Mackerel Egg Surveys

2020/FT/EOSG01 A **Working Group on Mackerel and Horse Mackerel Egg Surveys (WGMEGS)**, chaired by Gersom Costas*, Spain and Brendan O'Hea*, Ireland, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2021	26–30 April	TBD	Interim report by 14 June 2021 to ACOM/SCICOM	Brendan O'Hea and Gersom Costas confirmed as new chairs.
Year 2022	WebEx after the survey and prior to WGWIDE meeting of the same year		Interim report by 30 September 2022 to ACOM/SCICOM	second meeting of group via correspondence and remotely as WebEx conference as it falls within the year of the triennial MEGS Survey. The date for report delivery is set after the WGWIDE meeting to be able to include the preliminary results of the 2022 survey.
Year 2023	April	tbd	Final report by 12 June 2023 to ACOM/SCICOM	

WGMEGS ToRs 2021 – 2023

TOR	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	DURATION	EXPECTED DELIVERABLES
a	Plan and coordinate the Mackerel/Horse Mackerel Egg Surveys in the ICES areas 4 to 9.	The egg surveys in the Northeast Atlantic (ICES areas 5 to 9) and in the North Sea (ICES area 4) provide important data for fishery-independent stock indices for Northeast Atlantic mackerel and for both the western and the southern horse mackerel stocks. The survey is part of a time-series that commenced in 1977. With up to 10 nations and up to 18 individual cruises participating in the survey, careful and	**3.1**	years 1 – 3	Continuously updated survey plans and survey summary sheets of the surveys in 2022/23 on the WGMEGS sharepoint

		detailed planning and coordination of the surveys is essential.			
b	Plan and Coordinate the sampling and laboratory analysis for mackerel/horse mackerel fecundity and atresia.	Reliable realized fecundity estimates are needed to convert the egg abundance data to SSBs. International coordination is needed to ensure that the samples collected on different survey are representative and collections efficient.	[3.1](#)	Year 1, 2 & 3	**Coordinated Sampling Plan for the surveys in 2022/23 on the WGMEGS sharepoint**
c	Review and update the manuals for the Mackerel and Horse Mackerel Egg Surveys and fecundity estimation	Well defined, standardized sampling and laboratory procedures are necessary to properly interpret the monitoring data as well as ensuring that rigorous and transparent QAQC procedures have been applied and can be evaluated by external reviewers.	[3.1, 3.2](#)	Year 1, 2 and 3	**Updated manuals for both, egg surveys and fecundity estimation for WGMEGS on the sharepoint in years 1 and 2, for for publication in TIMES in year 3**
d	Coordinate the quality-controlled data delivery to the ICES databases for both, egg abundance and fecundity data	x	[3.1](#)	Year 3	**Updated ICES egg and larval database.** **ICES fecundity and atresia database**
e	Organise and evaluate workshops aimed at developing survey specific expertise in fish egg identification and staging, and fecundity estimation	For quality assurance in the year before the Atlantic survey two workshops will be organized in which survey participants are obliged to participate in order to standardize egg identification and staging and fecundity estimation. The WGMEGS manual is required to be updated with the results from those workshops.	[3.2, 3.3](#)	Year 1 and 2	**TIMES survey manual article**
f	Prepare, organise and evaluate a workshop on mackerel and horse	Since the recent surveys and due to rapidly changing	[3.2, 3.3](#)	Year 3	**CRR**

	mackerel survey design and data quality assurance and control	environmental conditions, the assumptions, under which the current survey design was determined, are being increasingly challenged. New survey strategies and techniques, as well as new methods for spatial data analysis need to be carefully implemented in order to maintain the integrity of the time series.		
g	**Provide relevant fisheries resources assessment groups with quality-controlled time series of indices on spawning stock biomass for mackerel, horse mackerel and hake in time fore the assessments.**	**Provisional estimates of mackerel SSB, and egg production of horse mackerel and hake are delivered in the year of the survey. The estimates however are finalized during the WGMEGS meeting in the year after the Atlantic survey.**	**1.3, 3.1, 5.1, 5.2**	**Years 2 and 3**

Summary of the Work Plan

YEAR 1	**PLANNING OF THE EGG SURVEY IN 2022, CONDUCT 2 WORKSHOPS TO DEVELOP SURVEY SPECIFIC EXPERTISE**
Year 2	Survey year, the Atlantic survey is conducted in 2022, a WebEx meeting will take place in year 2 after the survey to collate the survey results and provide preliminary results. A report, by correspondence, with the updated planning and manuals, and the preliminary results of the 2022 survey, is published.
Year 3	Reporting and finalizing of the results of the 2022 egg survey. Planning of the 2023 North Sea egg survey. Delivery of CRR on mackerel and horse mackerel survey design.

Supporting information

Priority	Essential. The egg survey provides important fishery-independent stock data used in the assessment for Northeast Atlantic mackerel and for the western horse mackerel stocks.
Resource requirements	No additional resources needed for ICES. For participants the surveys are all part of the national programs. The surveys and associated meetings are also partially funded under the EU fisheries data directive.
Participants	Usually ca. 15–20 participants from ICE, Far, N, NL, P, ESP, UK (E), UK (Scot), DE, DK, IRL.