

Working Group on the History of Fish and Fisheries (WGHIST)

2020/FT/HAPISG05 The Working Group on the History of Fish and Fisheries (WGHIST), chaired by Bryony Caswell, UK; and Camilla Sguotti, Germany, 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	21-25 June	Online meeting		
Year 2022	early Sept. 2022	TBC (possibly Newcastle, UK)		
Year 2023	early Sept 2023	tbc	Final report by 1 December to SCICOM	

ToR descriptors

TOR	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	DURATION	EXPECTED DELIVERABLES
a	Collect, assemble, and integrate meta-data on marine social-ecological systems through time and develop links with historical data management bodies (within and beyond ICES) to: explore shared interests and compatibilities, and collaboratively develop data products to encourage the use, preservation, and maintenance of historical data.	Data from WGHIST supports the development of tools for marine living resource management and provides a resource of historical and long-term information for the global community via the ICES Data centre. In addition, WGHIST can work with the ICES Data Centre and others to identify further opportunities for promoting and facilitating access to historical and archival resources housed by other institutions (e.g. by collating and digitizing them). WGHIST can also work with other experts to develop guidelines for best practises in using of long-term data for research and management.	6.1, 7.7	3 years	Digital products, such as indexing WGHIST metadata on the ICES Spatial Facility. Guidelines on best practice within ICES and beyond for using and/or applying historical data to contemporary advice for management.
b	Explore the actual or potential synergies between different kinds of historical data and provide tools both for communicating, and for bridging disciplinary differences in data usage.	Historical data comes in many forms, and often requires an open and responsive approach to its usage. When 'traditional' (i.e. independently verifiable and/or quantitative) data is missing or incomplete, it may be supplemented by 'non-traditional' (i.e. anecdotal or less easily verified) data. These non-traditional data can be more challenging to integrate into management which	7.7	3 years	Wiki providing resources such as: information on best practice and examples of how to understand and the overcome the challenges and constraints of using different kinds of data; with links to other relevant resources that can help to address the integration of different

		<p>predominantly focuses on using modern, quantitative data. However, WGHIST is uniquely placed to facilitate cross-disciplinary discussions on how to overcome these challenges, and on best practices for effective integration of 'traditional' and 'non-traditional' historical data for science and management.</p>			<p>data types for effective and high-quality research.</p>
c	<p>Evaluate long-term changes within marine social-ecological systems, and explore how this knowledge can be applied to contemporary science and management.</p>	<p>The interdisciplinary nature of WGHIST, with expertise in marine ecology, fisheries biology, historical ecology, palaeo-ecology, social and environmental history, offers a unique forum for conducting transdisciplinary research into marine social-ecological systems. It may therefore provide unique data and knowledge that can be leveraged to improve our understanding of social-ecological systems and their dynamics (e.g., scale, direction and drivers of change through time).</p>	2.2, 4.5, 5.4, 7.7	3 years	<p>Submission of (1) manuscript for peer review which might explore the origins or impacts of 'technology creep' in social-ecological systems. OR opinion/perspective piece on the applications of historical data for contemporary science. Provide knowledge that could contribute important context for the ICES fisheries and ecosystems overviews.</p>
d	<p>Explore the utility of historical data for understanding the social-ecological outcomes of emerging management strategies.</p>	<p>WGHIST is unique in bringing together specialists from very different fields who have particular interests in using unconventional resources and approaches, and interdisciplinary methodologies to interpret social-ecological trends over long (decadal to centennial) periods of time. With many new challenges becoming apparent in the 21st Century, so too are new ways of thinking and innovative solutions for how global society may continue to develop, and how we may in turn manage our resource use. WGHIST can provide valuable context on the possible outcomes from these strategies, in particular the response of human societies to past development. For instance, (a) attitudinal and behavioural shifts in effective resource management, and (b) changing patterns of access and</p>	2.2, 2.7, 7.7	3 years	<p>Work towards published outputs addressing the historical implications of subsidies and the political context for social-ecological change over time, and/or resource sustainability.</p>

use-rights.

Summary of the Work Plan

Year 1	<p>In Year 1, WGHIST will work with the ICES Data Centre and external bodies to explore the opportunities for developing data products that encourage use of and enhance the visibility of historical and long-term data (ToR a). Production of resources on best practice guidelines (ToRs a, b) will also commence during the Year 1 meeting, as will outlining of perspective/opinion pieces on the applications of historical data (ToR b). Potential areas of interest already identified by WGHIST members for ToRs c and d include: quantifying changes in ecosystem services over time, detailing fishing technology change and cumulative impacts upon fishing efficiency, and invoking cross-disciplinary knowledge to expand our understanding of linked social-ecological system change through time. Post-meeting work will involve soliciting contributions from the wider WGHIST membership list and continued development of manuscripts.</p> <p>The WGHIST 2021 meeting will discuss re-establishing links with the ICES SIHD and other WG with expertise relevant to WGHIST aims, through invitation of SIHD and WG Chairs to the WGHIST meeting, whether in person or remotely. These efforts aim to strengthen cross-disciplinary ties and enhance communication and learning among ICES WGs. Links with external groups will also be maintained (e.g. Oceans Past Initiative) and expanded (e.g. PICES, and the Ocean Biogeographic Information System) to enhance interdisciplinary learning and collaboration.</p>
Years 2 and 3	<p>In years 2 and 3 WGHIST will continue to develop digital tools for historical metadata, explore opportunities for improving the accessibility of historical data for use by the scientific community, and develop protocols for best practise when using historical data, potentially in collaboration with the ICES Data Centre and other WGs. While these tools will be finalised in year 3, it is our hope that progress will be ongoing throughout years 1 and 2, including the provision of digital updates to the ICES community during this time.</p> <p>Years 2 and 3 will also see progress on the proposed manuscripts and perspective pieces, and the WGHIST chairs will work to maintain and enhance connections with other relevant WG, and external bodies as above. Year 2 will forward manuscript and guidelines in our ToRs, specific research from WGHIST members will be used to expand this work. Deliverables will then be completed in Year 3.</p>

Supporting information

Priority	<p>The value of historical marine ecology and historical data for evaluating current ecosystem health has been well established in the literature. Understanding social-ecological change – and in particular, long-term trends in social-ecological interactions and their current impacts – has great potential for informing decision making and management of ecosystems and marine service industries in the future.</p> <p>Scientific Scope: WGHIST will continue to operationalize historical data for addressing contemporary scientific questions and future management needs. This iteration of WGHIST will prioritise the capture, assembly, and integration of data on ecosystem changes resulting from interactions between social and ecological systems over time, and it will conduct interdisciplinary research based on this data. In this way, it may inform the future management and decision-making of marine resource use.</p>
Resource requirements	<p>WGHIST will continue to consult with ICES Data Centre staff, as well as informally with data management experts and gatekeepers beyond ICES, in order to facilitate (and refine best-practice for) the assembly and integration of metadata within and beyond the organisation. New WGHIST Chairs will contact SIHD chairs to broaden still further the scope for intra-ICES collaboration on the collation, integration and best use of historical data in management and future decision-making.</p>

	The lessons from this year's remote WGHIST meeting, and the broader lessons to be taken from the impact of COVID-19 on organisational and administrative paradigms, suggest the high value in the future of operationalising remote meetings, conferences and consultations. Any assistance that ICES can offer for supporting remote consultation and meetings would be very much appreciated.
Participants	The chairs will review, and seek to enhance, group membership early in the new iteration of WGHIST. Currently, the members include ecologists, historians, social scientists, economists, policy experts and data analysts working in or connected to historical marine ecology, and we will seek to ensure that this diversity is maintained throughout the next group iteration. Past experience predicts attendance of 8-15 group members and guests at face-to-face annual meetings. However, the experience of this year's remote meeting suggests that this core group could potentially be greatly enhanced with the further use of remote technologies – either for individual participants who are unable to attend in person, or for the organisation of the meeting as a whole.
Secretariat facilities	Standard support (potentially meeting rooms & remote capabilities).
Financial	No financial implications.
Linkages to ACOM and group under ACOM	WGHIST will actively seek out connections within ACOM for the application of historical ecology work into scientific advice (e.g. stock baselines, change through time, context for IEAs, etc).
Linkages to other committees & groups	Potential links to ACOM, EPDSG, HAPISG, IEASG, SIHD as well as WGBIODIV, WGBFAS, WGECON, WGMARS, WGMIXFISH, WGRMES, WGSAM, DIG, WGSEDA, WGECON and WGSOCIAL depending on interest and availability of committee and group members to join in person or remotely.
Linkages to other organization	Participants in the Oceans Past Initiative (OPI) will be interested in our work and outcomes, and WGHIST will further enhance existing links with this group. WGHIST has an international participation beyond ICES member countries (including Australia, South Africa and Italy) and these will be maintained and, where possible, further enhanced. We intend to work together with the Ocean Biodiversity Information System (OBIS) executive to make historical data (metadata as a minimum) on fish and fisheries available through the OBIS portal.