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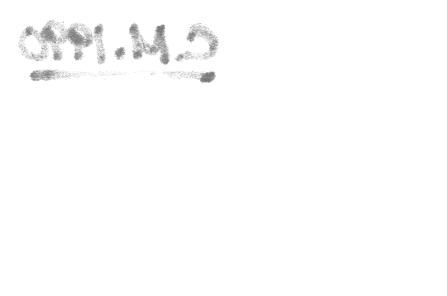
C. M. 1990

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA
CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

COUNCIL MEETING 1990

CONTRIBUTIONS TO BE PRESENTED AT THE 78TH STATUTORY MEETING

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GEN - GENERAL ASSEMBLY REPORTS AND PAPERS OF GENERAL INTEREST

Gen:1	Observers' reports from cooperating organizations (and Addendum)
Gen:2	ICES activities in 1989/1990
Gen:3	Election of a standing scientific Committee Chairman at the 78th Statutory Meeting (E + F) $$
Gen:4	Advance Release of Tables 1-6 of Bulletin Statistique, Vol. 74, 1989
Gen:5	Oceanographic Data Centres in the ICES Community

⁽E+F) = in English and French.

DEL - DELEGATES DOCUMENTS

Del:1*	Audited Income and Expenditure Accounts for the Financial Year 1988/1989 with Balance Sheet at 31/10 1989
Del:2*	Preliminary report on administration for the year 1 November 1989 to 31 October 1990
Del:3*	Report on activities, 1990
Del:4*	Estimated accounts for the financial year 1989/1990
Del:5*	Draft budget for the financial year 1990/1991 (E+F)
Del:6*	Draft forecast budget for the financial year 1991/1992 (E+F)
Del:7*	Elections and appointments by the Council at the 78th Statutory Meeting (E+F) $$
Del:8*	Report of the meeting of the $\underline{ad}\ \underline{hoc}$ Planning Group for the Eighth Dialogue Meeting
Del:9*	Request for observer status by Greenpeace International
Del:10*	North Sea Task Force Progress Report
Del:10* Del:11*	North Sea Task Force Progress Report Guidelines for North Sea Task Force activities within the Secretariat and ICES
	Guidelines for North Sea Task Force activities
Del:11*	Guidelines for North Sea Task Force activities within the Secretariat and ICES Report of ICES-HELCOM meeting, ICES Headquarters, 6
Del:11* Del:12*	Guidelines for North Sea Task Force activities within the Secretariat and ICES Report of ICES-HELCOM meeting, ICES Headquarters, 6 February 1990 Report of ICES-OSPARCOM-HELCOM Inter-Secretariat
Del:11* Del:12* Del:13*	Guidelines for North Sea Task Force activities within the Secretariat and ICES Report of ICES-HELCOM meeting, ICES Headquarters, 6 February 1990 Report of ICES-OSPARCOM-HELCOM Inter-Secretariat meeting, Copenhagen, 5 February 1990
Del:11* Del:12* Del:13* Del:14* Del:15*	Guidelines for North Sea Task Force activities within the Secretariat and ICES Report of ICES-HELCOM meeting, ICES Headquarters, 6 February 1990 Report of ICES-OSPARCOM-HELCOM Inter-Secretariat meeting, Copenhagen, 5 February 1990 Cooperation with Commission of EC North Atlantic Committee for Cooperation on Re-

^{*} For Delegates only. (E+F) = in English and French.

FI - FINANCE COMMITTEE

Fi:1* Agenda for the Finance Committee

PUB - PUBLICATIONS COMMITTEE

Pub: 1*	Agenda for the Publications Committee
Pub:2*	Publication activities in 1989/1990
Pub:3*	Sale of ICES publications during the last three years
Pub: 4*	Report from the Editors of the Journal du Conseil for the ICES Year 1989-1990 $$
Pub:5*	Arrangements for handling publication of Journal du Conseil
Pub:6*	ICES publications: sales and expenditure

REFERENCE PAPERS FOR THE PUBLICATIONS COMMITTEE

E:8	Editor's report on Techniques in Marine Environmental Sciences
F:3	Report of the Editor of the Disease Sheets
L:111	Report of the Editor of the Plankton Identification Sheets

^{*}For the relevant Committees only.

A - CONSULTATIVE COMMITTEE

A:1*	Agenda for the Consultative Committee
A:2*	Report of the Programme Planning Group Meeting, ICES Headquarters, 24-25 May 1990
A:3*	Minutes of ACFM Meeting, 31 October-8 November 1989
A:4*	Minutes of ACFM Meeting, 15-23 May 1990
A:5*	Report of the ICES-IOC Study Group on Models for Recruitment Processes, Paris, 7-11 May 1990
A:6*	Report of the Inter-Committee Recruitment Group, Copenhagen, October 1990
A:7*	Minutes of the meeting of the Advisory Committee on Marine Pollution, Copenhagen, 5-14 June 1990
A:8*	Future ICES Symposia

REFERENCE PAPERS FOR THE CONSULTATIVE COMMITTEE

Del:15*	North Atlantic Committee for Cooperation on Research on Marine Mammals
Del:17*	Proposed Agreement on the Conservation of Small Cetaceans

^{*}For the relevant Committee only.

B - FISH CAPTURE COMMITTEE

	B:1		Report of Activities, 1989
V	B:2 Sess.R	R. Toresen	Absorption of acoustic energy in dense herring schools studied by attenuation in the bottom echo signal
	B:3 Sess.U	P.A. Koeller	Controlling the variability of survey gear performance
	B:4		Withdrawn.
	B:5	B.Ja. Krayzler	Hydroacoustic automatised system for studying objects' behaviour
	B:6		Withdrawn.
	B:7		Withdrawn.
	B:8		Withdrawn.
	B:9 Sess.R	A. Lebourges	Species recognition based on the spectral signature of individual targets $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right) +\frac$
	B:10 Sess.R	P. Degnbol et al.	ECHOANN - An analyzer for echosounder signals
	B:11 Sess.R	H. Bodholt	Fish density derived from echo integration and $\underline{in}\ \underline{situ}$ target strength measurements
624 	B:12 Sess.R	B.S. Nakashima and D.S. Miller	The effect of trawl selectivity on estimates of acoustic biomass and year-class strength of capelin ($\underline{\text{Mallotus}}$ $\underline{\text{villosus}}$)
0	B:13 Sess.P	B.S. Nakashima	The application of airborne digital imagery and image analysis techniques to detect and measure capelin schools (Mallotus villosus)
	B:14 Sess.U	R.B. Millar and S.J. Walsh	Analysis of trawl selectivity studies with an application to trouser trawls
	B:15		Withdrawn.
	B:16 Ref.G	K. Groeneveld and A.D. Rijnsdorp	The effect of a flip-up rope on the catch efficiency of an 8-m beam trawl
	B:17	F.A. Veenstra and J. Stoop	Safety integrated redesign of Dutch beam trawlers
	B:18	A.M. Buys	Integrated wheelhouse electronics: a layout on board Dutch beam trawlers
	B:19	B. van Marlen et al.	Performance measurements on a single-door trawl towed at the sea surface $ \begin{tabular}{ll} \hline \end{tabular} $
	B:20	D. Tianyuan, J.W. de Wilde and J. de Jager	Economic results of stern freezer trawlers in relation to technical parameters

V	B:21 Sess.R	K.G. Foote	Equivalent beam angles for several standard transducers
1	B:22 Sess.R	K.G. Foote	Bad-weather calibration of split-beam echo sounding systems
1	B:23 Sess.R	K.G. Foote	Simultaneous two-sphere two-transducer calibration
Carpender	B:24 Sess.R	K.G. Foote	How to correct fish density estimates for extinction
	B:25		Withdrawn.
	B:26	M.R. Martins,	Gillnet selectivity experiments on pout (Trisopterus
	Sess.U	F. Cardador	<u>luscus</u>) in Portuguese waters
	B:27 Sess.U	A. Järvik and P. Suuronen	Selectivity of Baltic herring trawls studied by the covered codend and twin codend methods
	B:28 Sess.U	P. Suuronen	Preliminary trials with a square mesh codend in herring trawls
	B:29		Withdrawn.
)	B:30 Sess.R	E. Ona	Optimal acoustic beam pattern corrections for split beam transducers
V	B:31 Sess.R	E. Ona and J. Traynor	Hull mounted, protruding transducer for improving echo integration in bad weather
	B:32		Withdrawn.
	B:33 Sess.R	E.J. Simmonds and D.N. MacLennan	Sea bed following: efficient data collection for echo integration
	B:34 Sess.U	R.S.T. Ferro and P.A.M. Stewart	The analysis of catch comparison data
	B:35		Withdrawn.
	B:36		Report on the joint session of the Working Groups on Fishing Technology and Fish Behaviour and on Fisheries Acoustics Science and Technology, Rostock, 25 April 1990
	B:37	B. van Marlen	A simulation model to determine the optimal freezing rate of a stern trawler for a given catch input
and a financial control of	B:38 Sess.R	A. Aglen and O.A. Misund	Swimming behaviour of fish schools in the North Sea during acoustic surveying and pelagic sampling trawling
Common	B:39	S. Løkkeborg	Fish shaped bait does not improve the response of coastal cod
V	B:40 Sess.R	O.A. Misund	Dynamics of moving masses variability in packing density and shape among pelagic shoools

The second second	B:41 Sess.R	O.A. Misund et al.	Relationships between the geometric dimensions and biomass of schools
Ą	B:42		Withdrawn.
	B:43		Withdrawn.
	B:44		Report of the Working Group on Fishing Technology and Fish Behaviour, Rostock, 23-24 April 1990
1	B:45		Report of the Working Group on Fisheries Acoustics Science and Technology, Rostock, 26-27 April 1990
J	B:46 Sess. U	B. Isaksen and J.W. Valdemarsen	Codend with short lastridge ropes to improve size selectivity in fish trawls
V	B:47		Reduction of fish by-catch in shrimp trawl using a solid separator grid in the aft belly
	B:48	N.R. Chessley and B.P. Gates	Techno-economic analysis of fishing system developments
	Sess.	F. Gerlotti, D. Petit et P. Fréon	Influence of the light of a survey vessel on TS distribution
			Evaluation of the influence of vessel noise by night on fish distribution as observed using alternate motor and sails aboard a survey vessel
Appropriate processor and a second	B:51 Sess.U	B. Isaksen, S. Lisovsky and V.A. Sakno	A comparison of the selectivity in codends used by Soviet and Norwegian trawler fleets in the Barents Sea

REFERENCE PAPERS FOR THE FISH CAPTURE COMMITTEE

D:25, D:34, G:32, J:13

C - HYDROGRAPHY COMMITTEE

	C:1	G.I. Nesvetova	Hydrochemical conditions in the Spitsbergen area according to the autumn 1972-1988 data
	C:2		Withdrawn.
	C:3	A.G. Kostyanoy and Yu.V. Stepanov	Mesoscale variability of hydrophysical fields generated by the Canary Current upwelling from the navigational and satellite observation data
	C:4 Ref.G+H	Ju.A. Vialov and Yu.S. Altman	Variabilté de rotation terrestre et des pêches
	C:5 Ref. G+H	A.A. Elisarov, B.N. Kotenev and S.N. Rodionov	Izhevsky's system of nature in the light of modern investigations
	C:6 Ref.E		Report of the PEX Study Group Meeting, Tallinn, 8-9 April 1990
	C:7 Ref.E	G. Weichart	The quality of "old" oceanographic phosphate data
بثر	C:8 (plu Sess.T	Annex)	Report of Working Group on Shelf Seas Oceanography, Fuengirola, Spain, 27-29 March 1990
	C:9		Report of the Working Group on Oceanic Hydrography, Copenhagen, 28-29 April 1990
	C:10		Report of the Working Group on Marine Data Management, Sopot, Poland, 1-4 May 1990
^;	C:11 Sess.P		Report of the Study Group for the Application of Aerospace Remote Sensing
	C:12 Sess.P	N.K. Højerslev and I. Trabjerg	A new perspective for remote sensing measurements of plankton pigments and water quality
	C:13	C. Druet	Synthesis on the results of triennial 1987-1989 S/V "Oceania" summer cruises performed in the energetically active zones of Greenland Sea
	C:14 Sess.P	I.A. Bychkova <u>et al</u> .	Experimental satellite monitoring of the Baltic Sea in the $1980s$
	C:15 Sess.P	B. Håkonsson	Remotely sensed water mass distributions and large scale sea surface circulations in the Skagerrak
	C:16		Withdrawn.
	C:17	J. Meincke	The Greenland Sea interannual variability
•	C:18	B. Krutskikh and A. Makshtas	Hydrological features of East Greenland current

/.	C:19	B. Krutskikh and A. Makshtas	Experience in estimating characteristics of sea/air interaction in the Greenland and Norwegian Seas
	C:20	K. Myrberg	Testing of a two-level flow model with stationary winds and simple basins $% \left(1\right) =\left(1\right) +\left(1\right) +$
	C:21	R.A. Myers, G. Mertz and J.A. Helbig	Long period salinity variations of Labrador slope water
	C:22	G. van de Kamp	Long-term changes in salinity distribution in the central North Sea
<u></u>	C:23	L. Sellmann	Interaction between the Greenland Sea gyre and the East Greenland Current at $75^{\rm O}{\rm N}$
÷	C:24	S.S. Krist- mansson <u>et al</u> .	The Greenland Sea Project in the western Iceland Sea: current measurements and water masses in the Denmark Strait
	C:25	J.W. Nielsen and E. Buch	Geopotential anomaly fields and geostrophic velocity profiles in the western Iceland Sea
<i>\</i>	C:26	J.C. Gascard and S.A. Malmberg	Circulation and hydrography in the Jan Mayen area
	C:27	S.A. Malmberg et al.	Greenland Sea Project in the western part of the Iceland Sea from Jan Mayen to the Denmark Strait
	C:28 Ref.L	W.E. Walser Jr. R Hughes and S.C. Rabalais	A new multiple interface data acquisition system MIDAS for use in shipboard data acquisition systems
<u>`</u>	C:29 Sess.P	P. Gudmandsen	Satellite observation of polar seas
V	C:30	T. Gytre and Ø. Østensen	A field intercomparison between an acoustic current profiler/ADCP and two Sarvonius type current meters
	C:31 (+ Ref.E	Addendum)	Report of the Study Group on SKAGEX Kiel, 31 October - 2 November 1989 and Gdynia, 6-9 March 1990
	C:32		Withdrawn.
/	C:33 Sess.P Poster	R. Rudloff	Application of remote sensing in hydrography and navigation
,	C:34	C. Afonso Dias, M.H. Cavaco and J. Pissara	Observation of the Azores front in July 1987 and June 1989
V	C:35	J. Aure et al.	The Jutland Current - Nutrient and physical oceanographic conditions in late autumn 1989

	C:36 Ref. G+H+L	S.A. Murawski and D.G. Mountain	Climate change and marine fish distributions: analogies from seasonal and annual variability
	C:37 Sess.P	P. Cornillon	Satellite-derived global sea surface temperature fields: 1981-present
	C:38		Withdrawn.
	C:39	V.A. Makarevich	On qualitative visualization of ocean water circulation and related matter transfer, numerical modelling results
	C:40 Ref.E	E.Fogelqvist, B. Yhlen and B.Thorstensson	Salinity effects in the analysis of nitrate in seawater
		L. Fusco, V. Barale and P.Schlitten- hardt	The ocean colour European archive network (OCEAN) project
	C:42 Sess.P	L. Fusco	\ensuremath{ESA} RS data archives and user access for past, present, and future missions
6	C:43		Hydrographer's Report
J. Comments of the Comments of	C:44 Ref.E	L. Føyn	SKAGEX 1990. Results from the nutrient intercalibration
	C: 4	15	

REFERENCE PAPERS FOR THE HYDROGRAPHY COMMITTEE

D:7, G:33, G:49, G:50, H:13, J:27, L:4, L:8, Poll:1, Poll:2

D - STATISTICS COMMITTEE

D:1		Report of the Statistics Committee Liaison Working Group, Copenhagen, 21-22 November 1989
D:2		Report of the Working Group on ADP Matters, Copenhagen. 15-16 March 1990
D:3		Withdrawn.
D:4 and	D:5	Withdrawn.
D:6 Ref.G	V.V. Blinov	To the methodology of modelling of the Barents Sea ichthyocenesis $% \left\{ 1,2,\ldots,n\right\}$
D:7 Ref.C+H	V.V. Blinov	The possibilities for modelling of oceanographic conditions of reproduction, spawning, and feeding migration paths for the northern stock of blue whiting in the North-East Atlantic
D:8		Withdrawn.
D:9	D. Vasilyev	Adaptive step cohort analysis
D:10 an	d D:11	Withdrawn.
D:12	P. Petitgas	A geostatistical variance of the total abundance estimate for a regular sampling \ensuremath{grid}
D:13	J.M. Hoenig, W.G. Warren and M. Stocker	Bayesian and related approaches to fitting stock production models
D:14	K.H. Pollock, J.M. Hoenig and C.M. Jones	Estimation of fishing and natural mortality when a tagging study is combined with port sampling
D:15	J.M. Hoenig and M.H. Prager	Can we determine the significance of key events on a recruitment time series? - A power study of superposed epoch analysis
D:16	M. Soriano et al.	New functions for the analysis of two-phase growth of juvenile and adult fishes, with application to Nile perch
D:17 Ref.M	W.S. Warren and J.B. Dempson	The precision of mark-recapture estimates under time interval stratification $ \\$
D:18 Ref.K	W.G. Warren	Classification without prior criteria illustrated with shellfish data
D:19	W.G. Warren	Outliers, mixtures, and extending the Delta distribution for fisheries surveys
D:20	W.G. Warren	Median Polish kriging of marine populations
D:21 Ref.G+H	P.A. Shelton, L. Fahrig and R.B. Billar	Uncertainty associated with cod-capelin interactions: how much is too much?

	D:22		Withdrawn.		
	D:23 Sess.S	R.A. Myers	Setting quotas in a stochastic fishery		
:	D:24 R.A. Myers Ref.G+H		The analysis of catch-at-age data in the presence of multiple stocks and seasonal migration		
V	D:25 Ref. B+H	K.G. Foote and G. Stefánsson	Definition of the problem of estimating fish abundance over an area from acoustic line-transect measurements of density		
ン	D:26 Ref.G	M. Azevedo, F. Cardador and E. Serrão	First attempt to estimate fish distribution and abundance based on geostatistical techniques applied to data collected on a Portuguese groundfish survey (ICES Division IXa)		
ب	D:27	E. Ferrandis	Effort and mortality in stochastic Brownian models for fish population dynamics		
V	D:28 Ref.H	H. Gjøsæter and K. Korsbrekke	Schooling-by-size in the Barents Sea capelin stock		
	D:29, D	30, and D:31	Withdrawn.		
	D:29, D D:32	30, and D:31 P. Pallarés and J.A. Pereiro	Withdrawn. LCA errors with recruitment fluctuations		
	•	P. Pallarés and			
	D:32	P. Pallarés and J.A. Pereiro ICES Statistician	LCA errors with recruitment fluctuations		
	D:32 D:33	P. Pallarés and J.A. Pereiro ICES Statistician	LCA errors with recruitment fluctuations Progress Report, 1989/1990 Report of the Study Group on the Applicability of Spatial Statistical Techniques to Acoustic Survey Data,		

REFERENCE PAPERS FOR THE STATISTICS COMMITTEE

G:24, G:26, G:52, G:53, G:61, H:6, J:17, Poll:6

E - MARINE ENVIRONMENTAL QUALITY COMMITTEE

E:1		Not available.
E:2	A.Y. Cantillo and J.M. Bewers	A catalogue of marine standards and reference materials
E:3	J.M. Bewers and R.J. Pentreath	Comparison of risks associated with marine fish consumption
E:4 Ref.G+J	O. Bagge et al.	Hypoxia and the demersal fish stock in the Kattegat (IIIa) and Sub-division 22
E:5		Withdrawn.
E:6	S. Mellergaard and E. Nielsen	
E:7	M.N. Moore and M.G. Simpson	Molecular and cellular pathology in environmental impact assessment
E:8 Ref.Pub		Editor's Report on Techniques in Marine Environmental Sciences
E:9 Ref.G	I. Marthinsen and G. Staveland	Levels of mercury in flounder (<u>Platichthys flesus</u> L.) and cod (<u>Gadus morhua</u> L.) caught during the year 1988 in the Hvaler archipelago, southern Norway
E:10	J. de Boer <u>et</u> <u>al</u> .	Intercomparison exercise on the analysis of individual chlorobiphenyl congeners in marine media - first step: optimization of gas chromatographic conditions
E:11	A.D. Vethaak and T.ap Rheinallt	A review and evaluation of the use of fish diseases in the monitoring of marine pollution in the North Sea
E:12	D. Bucke and S.W. Feist	Marine fish diseases: an overview of 10 years investigations by MAFF (UK)
E:13	C.F. Fileman et al.	Dissolved and particulate trace metals in surface waters over the Dogger Bank, central North Sea
E:14	R.J. Law and M.D. Nicholson	The 4th round hydrocarbon intercomparison programme: preliminary assessment of Stage 1
E:15	R.G. Lees et al.	Benthic studies in relation to dredging activity off the Isle of Wight, southern England
E:16	G. Irion and G. Müller	Sedimentary processes in the North Sea as revealed from heavy metal distributions in sediment cores
E:17	S.M. Rowlatt et al.	Some effects of colliery waste disposal on sediment quality off the northeast coast of England

E:18 Ref.F	J.E. Thain, P. Matthiessen and S. Bifield	The toxicity of dichlorvos to some marine organisms
E:19 Sess.P	R. Doerffer	How to derive concentrations of chlorophyll, suspended matter, and gelbstoff from multispectral radiances of case II water?
E:20 Ref.G	D. Vethaak, M. Eggens and J. Jol	On the frequency of left-sided individuals in European flounder ($\underline{Platichthys}$ \underline{flesus}) populations in relation to pollution monitoring
E:21 Ref.J	PO. Larsson	Diseases of cod observed on Swedish surveys in the ${\tt Baltic}$
E:22	M. Kersten and I. Kröncke	Bioavailability of trace metals from marine sediments
E:23		Withdrawn.
E:24	L. Massie, A. McIntosh and J.M. Davies	Assessment of fish from the northern North Sea for oil taint $% \left(1\right) =\left(1\right) \left(1\right) $
E:25 Ref.F	I.M. Davies, W. Turrell and J. McHenery	Environmental impact of fish farms in Scottish sea lochs
E:26	G. Topping and D. Wells	Quality assurance work in relation to the North Sea Task Force Monitoring Programme
E:27	G. Clark, D.C. Moore and I.M. Davies	Recovery of a sewage sludge dumping ground
E:28 Sess.T		Report of the Working Group on the Effects of Extraction of Marine Sediments on Fisheries, Charlottetown, Canada, 15-18 May 1990
E:29	A. Köhler- Günther <u>et</u> <u>al</u> .	Report on the interdisciplinary research project "Fish diseases in the Wadden Sea"
E:30	A. Köhler- Günther	Celullar responses in fish liver as indicators for toxic effects of environmental pollution $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}$
E:31 Ref.G	T. Lang	Infestation of North Sea whiting ($\underline{\text{Merlangius}}$ $\underline{\text{merlangus}}$ L.) with externally visible parasites
E:32 Ref.K	R. Knust	The black spot disease in $\underline{\text{Crangon}}\ \underline{\text{crangon}}\ L.$ of the German Bight
E:33	PD. Hansen and R.F. Addison	The use of mixed function oxidases (MFO) to support biological effects monitoring in the sea
E:34	P.J. Kershaw, G.J. Hunt and P.A. Gurbutt	A seabed source of artificial radionuclides

E:35 Draft Cooperative Research Report on the Effects of Extraction of Marine Sediments on Fisheries

E:36 M. Perttilä Conclusions of the Critical Review of Baltic Sediments

REFERENCE PAPERS FOR THE MARINE ENVIRONMENTAL QUALITY COMMITTEE

C:6, C:7, C:31, C:40, C:44, F:34, K:11, N:12, N:14, Poll:1 to Poll:7

F - MARICULTURE COMMITTEE

	F:1		Report of Activities, 1989		
V	F:2 Ref.G	E. Moksness and D. Stefanussen	Growth rates in cultured common wolffish (<u>Anarhichas lupus</u>) and spotted wolffish (<u>A. minor</u>)		
	F:3 Ref.Pub		Report of the Editor of the Disease Sheets		
	F:4		Withdrawn.		
	F:5	V.G. Martynov, N.K. Vorobieva and G.L. Gorshkova			
	F:6		Withdrawn.		
1	F:7	JE. Juell	Hydroacoustic detection of food waste - a method to determine maximum food intake of fish populations in sea cages		
	F:8 Sess.O	W.L. Silvert et al.	Modelling the feeding, growth, and metabolism of cultured salmonids $% \left(1\right) =\left(1\right) \left(1\right)$		
	F:9	J.E. Stewart et al.	An analytical approach for evaluating opportunities in mariculture and assessing research needs: a proposal		
	F:10	I.E. Calcedo	The effect of feed protein content on the intake and growth of turbot ($ \underbrace{Scophthalmus}_{} \ \ maximus \ L.) $		
	F:11		Publications of interest to the Mariculture Committee, 1989-1990		
	F:12 Sess.T		Report of the Working Group on Environmental Impacts of Mariculture, Aberdeen, 27-31 March 1990		
	F:13 Sess.T		Report of the Working Group on Pathology and Diseases of Marine Organisms, Vigo, Spain, 23-27 April 1990		
	F:14		Report of the Working Group on Introductions and Transfers of Marine Organisms, Halifax, 6-8 June 1990		
	F:15		Report of the Working Group on Genetics		
	F:16		Withdrawn.		
	F:17	R. Lauterbach	Production principles for rainbow trout aquaculture in coastal brackish waters of the German Democratic Republic		
	F:18	O. Fukuhara, <u>et al</u> .	Development and behaviour of larvae and juveniles of turbot, $\underline{Scophthalmus}$ $\underline{maximus}$ L_{\cdot} , in hatchery tanks		

F:19 E.A. Black, New developments in air transportation of salmon smolts B. Redfern and H. Rosenthal F:20 H. Rosenthal, Evaluation of shelters to reduce cannibalism in juvenile K. Lawonyawut Macrobrachium rosenbergii under intensive culture condiand J. Willführ tions F - 21 H. Rosenthal A proposed glossary on biological and technical terms relevant to aquaculture et al. F:22 R.C. Reves, Respiration and behaviour of Macrobrachium rosenbergii U. Waller at different levels of oxygen saturation and H. Rosenthal P. Fischer, F:23 In situ and laboratory investigations of respiration and behaviour of Gasterosteus aculeatus and Zoarces vivipa-U. Kils and U. Waller ris at various oxygen concentrations F:24 C.A. Fernandez- Larval rearing of turbot (Scophthalmus maximus): effect Pato et al. of density of living food C.A. Fernandez- Effect of vitamin C on turbot (Scophthalmus maximus) F . 25 using different experimental diets in feeding Pato et al. C. Martinez-Effect of vitamin C on hypertyrosinemic diet in turbot F:26 Tapia et al. (Scophthalmus maximus) F:27 C.A. Fernandez- Use of pyridoxine and ascorbic acid at different doses in Pato et al. turbot (Scophthalmus maximus) in experimental feeding F:28 Withdrawn. C.A. Fernandez- Growth of turbot (Scophthalmus maximus) from 1 to 3,000 q F:29 Pato et al. in the north of Spain C.A. Fernandez- Spawn, hatching, and larvae rearing of black spot sea F : 30 bream (Pagellus bogaraveo): first experiences of its cul-Pato <u>et al</u>. ture in the Oceanographic Center of Santander (Spain) F:31 C. Tapia-Comparative study of larval survival and growth in sea Martinez bream (Pagellus bogaraveo) using microencapsulated or living food et al. O. Cherequini Growth of wild black spot sea bream (Pagellus bogaraveo) F:32 under laboratory conditions. Some interesting parameters G. Andorsdóttir Comparisons of broodfish quality and egg quality in F:33 Atlantic salmon of Norwegian farmed strain, wild Atlantic salmon and ocean ranching Atlantic salmon of Norwegian farmed strain F:34 P.K. Hansen, Effects of organic waste from marine fish farms on the

seabottom beneath the cages

Ref.E

K. Pitman

and A. Ervik

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VF:35	A. Ervik <u>et al</u> .	Interactions between heritage, health, growth and environmental conditions in fish farming. Part 1: heritage, environment, and growth		
F:36	B. Hjeltnes et al.	Interactions between heritage, health, growth and environmental conditions in fish farming. Part 2: health		
36 F:37		Proposed revisions to the ICES Code of Practice. A report of the ICES Working Group on Introductions and Transfers of Marine Organisms		
V F:38	Ø. Bergh, G.H. Hansen and A. Jelmert	Bacterial diseases of eggs and yolk sac larvae of halibut $(\underbrace{\text{Hippoqlossus}}_{\text{hippoqlossus}} \underbrace{\text{L.}}):$ characterization and experimental infection		
V F:39	Ø. Bergh and A. Jelmert	Antibacterial treatment procedures of eggs of halibut $(\underbrace{Hippoqlossus}_{}$ $\underbrace{hippoqlossus}_{}$ $L_{\cdot})$		
F:40	J.V. Helvik and K. Pittman	Light affects hatching, development and pigmentation of halibut ($\underbrace{Hippoglossus}_{}$ $\underbrace{hippoglossus}_{}$ L .)		
F:41	I. Opstad Effects of continuous flow rate on development and and Ø. Bergh mortality of halibut yolk sac larvae			
F:42		Withdrawn.		
F:43	A.B. Skiftesvik et al.	Effect of light on the development, activity, and mortality of halibut ($\underline{\text{Hippoqlossus}}$ $\underline{\text{hippoqlossus}}$ $\underline{\text{L.}}$) yolk sac larvae		
F:44	K.E. Naas and	Initial feeding rates of Atlantic halibut larvae (Hippo-		
V F: 44	A. Mangor- Jensen	glossus hippoglossus) at different prey densities		
F: 44	A. Mangor-			
V	A. Mangor- Jensen A. Jelmert	glossus hippoglossus) at different prey densities Induced deformities on larvae of the Atlantic halibut (Hippoglossus hippoglossus L.). A new experimental		
F: 45	A. Mangor- Jensen A. Jelmert	<pre>glossus hippoglossus) at different prey densities Induced deformities on larvae of the Atlantic halibut (Hippoglossus hippoglossus L.). A new experimental approach</pre>		
F: 45	A. Mangor- Jensen A. Jelmert and K.E. Naas H. Otterå and	glossus hippoglossus) at different prey densities Induced deformities on larvae of the Atlantic halibut (Hippoglossus hippoglossus L.). A new experimental approach Withdrawn.		
F: 45 F: 47	A. Mangor- Jensen A. Jelmert and K.E. Naas H. Otterå and Ø. Lie G. Blom	Induced deformities on larvae of the Atlantic halibut (Hippoglossus hippoglossus L.). A new experimental approach Withdrawn. Weaning trials with cod fry on artificial diets Comparative growth and survival of two genetic strains of Atlantic cod (Gadus morhua L.) reared through the early		
F: 45 F: 46 F: 47 F: 48	A. Mangor-Jensen A. Jelmert and K.E. Naas H. Otterå and Ø. Lie G. Blom et al. A.C. Barnes	Induced deformities on larvae of the Atlantic halibut (Hippoglossus hippoglossus L.). A new experimental approach Withdrawn. Weaning trials with cod fry on artificial diets Comparative growth and survival of two genetic strains of Atlantic cod (Gadus morhua L.) reared through the early life stages in a marine pond in western Norway In vitro activities of 4-quinolone antimicrobials against		

	F:52	K. Boxaspen, T. Harboe and L.H. Skjolddal	Calculated rate of halibut larvae (<u>Hippoglossus hippoglossus</u> L.) from startfeeding to metamorphosis on diet of natural zooplankton and <u>Artemia</u> sp.
	F:53	T. Harboe et al.	Age of Atlantic halibut ($\underline{\text{Hippoglossus}}$ $\underline{\text{hippoglossus}}$ L.) larvae at first feeding
	F:54		Withdrawn.
	F:55 Ref.M	D.M. Furevik <u>et al</u> .	Migratory patterns of escaped farm-raised Atlantic salmon
,	F:56		Withdrawn.
V	F:57	H. Rabben et al.	Startfeeding success of halibut larvae as a function of temperature regime
	F:58		Withdrawn.
2.	F:59	L.H. Skjolddal et al.	Calculated growth rate of halibut larvae ($\underbrace{\text{Hippoglossus}}_{\text{hippoglossus}}$ L.) as a function of introduction time for $\underbrace{\text{Artemia}}_{\text{sp.}}$ sp.
V	F:60	L.H. Skjolddal et <u>al</u> .	A comparison of growth rate of halibut larvae ($\underline{\text{Hippo-glossus}}$ hippoglossus L.) fed natural zooplankton and enriched $\underline{\text{Artemia}}$ sp.
	F:61	T. Næss et al.	Green water in larvae culture - an experiment with natural phytoplankton in tanks for first feeding of halibut larvae ($\underline{\text{Hippoglossus}}$ $\underline{\text{hippoglossus}}$ $\underline{\text{L.}}$)
No.	F:62		Withdrawn.
Se ved	F:63 Ugg_	R. Nortvedt et al.	A multivariate approach to investigate growth of Atlantic salmon parrs as a function of water quality in rearing tanks
V	F:64 Ref.M	R. Nortvedt et al.	Smoltification of Atlantic salmon in different water qualities and subsequent growth in seawater, following distinct transfer strategies from freshwater
	F:65	**	Report of the Working Group on Mass Rearing of **Tuvenile Marine Fish
<i>^</i>	F:66	J. Munro et al.	Stress and osmotic performance of Atlantic cod (Gadus morhua) at low enrichment salinity
	F:67	HJ. Jennerich	Investigations on offshore trout production along the coast of the German Democratic Republic
· ·	F:68	G. Schneider, T. Jäger and H. Rosenthal	Growing trout in global cages in an effluent plume of a coastal power station $\ensuremath{\mathbb{L}}$
	F:69	Annegret Anders and E. Anders	Diagnostic investigations of bacterial infections of rainbow trout in coastal waters of the German Democratic Republic
	F:70	E. Anders	Experimental polyploidization in rainbow trout

F:71	W. Gierer	$\label{lem:pharmaco-kinetic} \textbf{Pharmaco-kinetic} \textbf{investigations} \textbf{on} \textbf{chloramphenicol} \textbf{in} \\ \textbf{trout} \\$
F:72	I. Achenbach and R. Fröse	Presentation of a database system for information on and diagnosis of fish diseases $% \left(1\right) =\left\{ 1\right\} $
F:73	I. Lein and I. Holmefjord	Larval age at first feed intake in Atlantic halibut (<u>Hippoglossus</u> <u>hippoglossus</u>)
F:74	I. Holmefjord and I. Lein	Natural spawning of Atlantic halibut ($\underbrace{\text{Hippoglossus}}_{\text{hippoglossus}}$) in captivity
F:75 Ref.M		Progress report of the Study Group on the Genetic Risks to Atlantic Salmon Stocks

REFERENCE PAPERS FOR THE MARICULTURE COMMITTEE

E:18, E:25, K:11, K:13, K:23, L:92, Poll:7

G - DEMERSAL FISH COMMITTEE

	G:1		Report of Activities, 1989
١	G:2		Report of the Study Group on Oceanic-Type <u>Sebastes</u> mentella, Reykjavík, 21-23 February 1990
4)	G:3 Sess.O	A.M. Ajiad	Variabilities in stomach contents of cod, collected by demersal and pelagic trawl in the southern part of the Barents Sea
<i>"</i> 。	G:4 Sess.Q <u>Poster</u>	A.M. Ajiad Cálille p	Trophic interrelation between length groups of Northeast Arctic cod in the southern part of the Barents Sea
Mb	G:5	J. Gjøsæter, K.E. Jørstad and G. Nævdal	Genotype distributions of cod from the southeastern coast of Norway
	G:6 Sess.O	A.V. Dolgov and N.A. Yaragina	Daily feding rhythms and food intake of the Barents Sea cod and haddock in the summer of 1989
	G:7	M.V. Kovtsova and Y.M. Lepesevich	Distribution, abundance, and survival conditions of haddock fingerlings from the 1982-1989 year classes in the southern Barents Sea
	G:8	M.S. Shevelev, A.E. Dorchenkov and V.S. Mamylov	Soviet investigations of cod, haddock and redfish within the Barents Sea and adjacent waters in 1989
	G:9		Withdrawn.
	G:10 Sess.S	G.P. Nizovtsev, M.V. Kovtsova and V.L. Tretyak	Fisheries regulation measures and biological substantiation of the minimum landing size for the Arcto-Norwegian cod and haddock
	G:11 Sess.0	A.V. Dolgov and K.V. Drevetnyak	Estimation of rations and food consumption of deep-water redfish ($\underline{\text{Sebastes}}$ $\underline{\text{mentella}}$) from the Norwegian-Barents Sea stock
	G:12	A.P. Shvagzhdis	Feeding peculiarities of Greenland halibut from the Norwegian-Barents Sea stock in 1980-1989
	G:13, 0	G:14, and G:15	Withdrawn.
	G:16 Sess.0	N.Ja. Lipskaya	Food consumption rates among fish larvae belonging to different biological groups
	G:17 Sess.0	D. Pauly, V. Christensen and V. Sambiley	Some features of fish food consumption estimates used by ecosystem modellers
	G:18 Sess.O	H.B. Hernandez, P.F. Aliño and A. Jarre	The daily food consumption of <u>Siganus fuscescens</u> , an important herbivore in the seagrass communities of Bolinao, Pangasinan Province, Philippines
>	G:19 Sess.0	A. Jarre, A. Temming and D. Pauly	A generalised approach for estimating daily ration from stomach content dynamics

	G:20	J. Alperi	Croissance des cardines ($\underline{\text{Lepidorhombus}}$ $\underline{\text{whiffiagonis}}$ et $\underline{\text{L}}$. $\underline{\text{boscii}}$) en Mer cantabrique (Division VIIIc du CIEM)
. 1	G:21	H. Dupouy, D. Christien and B. Kergoat	Estimation de la mortalité par pêche et rendement par recrue du lieu jaune ($\underline{Pollachius}$ pollachius) du plateau celtique
V	G:22 Sess.O	B. Bogstad and S. Mehl	The consumption rate of North-East Arctic cod - a comparison of gastric evacuation models
	G:23		Withdrawn.
	G:24 Ref.D	R.B. Millar and R.A. Myers	Modelling environmentally induced change in growth for Atlantic Canada cod stocks
	G:25 Ref.H	R.B. Millar, L. Fahrig and P.A. Shelton	Effect of capelin biomass on cod growth
	G:26 Ref.D	L. Fahrig and B. Atkinson	Concurrent exploitation of multiple stocks: a redfish simulation study $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}$
	G:27 Ref.L	M.A. van der Land, H.J.L. Heessen and A.D. Rijnsdorp	The result of the 1989 egg surveys for cod and plaice
	G:28		Withdrawn.
	G:29 Ref.H+	H.C. Welleman J	Annual check formation in otoliths as a starting point for ageing by means of computer analysis
	G:30 Ref.H	H. Gislason	Fishing patterns and yield variations
	G:31 Sess.0	A. Temming F. Köster	Stomach evacuation rates of cod and herring estimated from field data
	G:32 Ref.B	Aa. Bjordal and T. Laevastu	Effects of trawling and longlining on the yield and biomass of cod stocks - numerically simulated
	G:33 Ref.C	B. Hansen, A. Kristiansen and J. Reinert	\ensuremath{Cod} and haddock in Faroese waters and possible climatic influences on them
	G:34 Sess.0	F.W. Köster et al.	Tank experiments on board: a useful tool for the estimation of stomach evacuation rates?
	G:35 Sess.O	P.J. Bromley and J. Last	Feeding in the trawl and the consequences for estimating food consumption in natural fish populations
	G:36 Sess.O	P.J. Bromley	$\begin{array}{llllllllllllllllllllllllllllllllllll$
	G:37	M. Greer Walker and P.R. Witthames	The fecundity of sole (<u>Solea solea</u>) in ICES Division IVb in 1987 and 1988 and VIId in 1988

	G:38	R.S. Millner and C.L. Whiting	Distribution and abundance of juvenile sole and plaice in the eastern English Channel from young fish surveys
	G:39		Withdrawn.
\$\frac{1}{4}	G:40 <u>Poster</u>	D. Otterlei and P. Grotnes	The growth of ling ($\underline{\text{Molva molva}}$) in populations along the continental shelf off Shetland, the Faroes, and Rockall
	G:41	J. Magnússon and Jutta V. Magnússon	Icelandic investigations on the oceanic stock of \underline{s} . $\underline{men-tella}$ in the Irminger Sea in 1989 and 1990
	G:42	Jutta V. Magnússon	Ageing and age composition of silver smelt (<u>Argentina silus</u> Asc.) in Icelandic waters
	G:43	J. Magnusson, K. Kosswig and Jutta V. Magnússon	Further studies on young redfish in the East Greenland Shelf area
	G:44		Withdrawn.
,	G:45	P. Pereda and I. Olaso	Feeding of hake and monkfish in the non-trawlable area of the shelf of the Cantabrian Sea
/	G:46 Ref.H		Preliminary report on the international 0-group fish Survey in the Barents Sea and adjacent waters in August- September 1990
V	G:47 Ref.H	H. Gjøsæter and A.M. Ajiad	Growth of Polar cod ($\underline{Boreogadus}$ \underline{saida}) in the Barents Sea
V	G:48 Ref.H	A.M. Ajiad and H. Gjøsæter	Diet of Polar cod (<u>Boreogadus saida</u>) in the Barents Sea related to fish size and geographic distribution
À	G:49 Ref.C	H. Loeng and H. Gjøsæter	Growth of O-group fish in relation to temperature conditions in the Barents Sea during the period 1965-1989
V	G:50 Ref.C+1		Report of the ICES Study Group on Cod Stock Fluctuations
	G:51 Sess.0	A.P. Robb	Gastric evacuation in whiting (Merlangius merlangus L.)
%	G:52 Ref.D+F	P. Kunzlik H+J	Ad hoc tuning of non-annual virtual population analyses
	G:53 Ref.D	S. Reeves	Linear modelling of discard data from Scottish demersal fisheries
\bigvee_{i}	G:54 Sess.U	O.R. Godø and K. Korsbrekke	Comparison of catches of cod from Norwegian commercial trawlers and research vessels
V	G:55 Sess.U	O.R. Godø and K. Sunnanå	Length selection during trawl sampling and its effect on abundance indices by age

	G:56	O. Jørgensen and K. Akimoto	Distribution and biology of <u>Sebastes</u> mentella in the Greenlandic part of the Irminger Sea in September 1989
/0	G:57 Poster	O. Jørgensen and K.Akimoto	Results of a stratified-random bottom trawl survey off Northeast Greenland in 1989
	G:58	H. Hovgård and F. Riget	A long-line estimate of swept area abundance of cod in inshore areas of West Greenland
	G:59		Report of the Study Group on Beam Trawl Surveys in the North Sea and English Channel, Ostende, 6-9 June 1990
\	G:60		Report of the Study Group on the Fecundity of Sole and Plaice in Sub-areas IV and VIII and Divisions VIId,e, Lowestoft, 18-21 September 1990
	G:61 Ref.D	HJ. Rätz	Remarks on the reliability of the abundance estimates derived from groundfish surveys conducted in Greenlandic waters
	G:62	R. Knust	Food and condition of dab ($\underline{Limanda}$ $\underline{limanda}$ L.) from the Dogger Bank and the German Bight
	G:63 Sess.O	P. Degnbol et al.	Experimental estimation of food preference in cod - results of a pilot experiment
	G:64		Withdrawn.
	G:65	O. Hagström, PO. Larsson and M. Ulmestrand	Swedish cod data from the International Young Fish Surveys, 1981-1990
	G:66	C.E. Purdom and D.J. Garrod	Fisheries on the Dogger Bank
	G:67	R.P. Briggs	Whiting recruitment studies using discard data from the Northern Ireland <u>Nephrops</u> fishery
	G:68 <u>Poster</u>	J. Jakobsson	Icelandic O-group fish survey
	G:69 Sess.O	J. dos Santos and M. Jobling	Aspects of gastric evacuation in the Atlantic cod (<u>Gadus</u> morhua L.)
	G:70 Sess.S	N. Daan	Ideas for re-arrangement of Assessment Working Groups

REFERENCE PAPERS FOR THE DEMERSAL FISH COMMITTEE

B:16, C:4, C:36, D:6, D:21, D:24, D:26, D,34, D:35, D:36, E:4, E:9, E:20, E:31, F:2, H:6, H:13, H:16, J:4, L:92, L:100, N:11, N:17,

H - PELAGIC FISH COMMITTEE

V	H:1		Report of Activities, 1989 (By E. Ballun
V	H:2		Report of the Mackerel/Horse Mackerel Egg Production Workshop, Lowestoft, 29 January - 2 February 1990
,	H:3 Ref.G Sess.S		Report of the International North Sea, Skagerrak, and Kattegat Bottom Trawl Survey Working Group, Copenhagen, 26 February - 1 March 1990
U	H:4	S.A. Iversen and E. Moksness	A preliminary study of microstructure in otoliths of sea-caught mackerel (Scomber scombrus L.) larvae
	H:5		Second Report of the EEC-Norwegian Joint Scientific Group on Migration and Area Distribution of Mackerel (Western Stock), Brussels, 12-13 December 1989
	H:6 Ref.D+	H. Sparholt G	Using GLM analysis on the IYFS herring data for the North Sea
	Н:7	E.I. Seliver- stova	Growth and maturation rate of Atlanto-Scandian herring in the 1950-1980s
	H:8	N.A. Isaev and S.V. Belikov	Results of Soviet investigations on blue whiting in the Northeast Atlantic in spring 1989
	H:9 Sess.P	N.A. Barkova and M.W. Domanevskaya	Utilisation des informations satéllitaires pour l'étude des particularités de répartition de la sardine dans l'Atlantique centre-est
	H:10		Withdrawn.
	H:10 H:11	E.M. Gerber	Withdrawn. Fish resources in oceanic areas of the North Atlantic
		E.M. Gerber	
. H	Н:11	L.I. Koval	Fish resources in oceanic areas of the North Atlantic Etude du remplacement du contingent géniteur dans la population de chinchard, <u>Trachurus symmetricus murphy</u>
¥	H: 11 H: 12 H: 13	L.I. Koval	Fish resources in oceanic areas of the North Atlantic Etude du remplacement du contingent géniteur dans la population de chinchard, <u>Trachurus symmetricus murphy</u> (Nichols) Report on the International Young Fish Survey in the
V	H:11 H:12 H:13 Ref.C+	L.I. Koval	Fish resources in oceanic areas of the North Atlantic Etude du remplacement du contingent géniteur dans la population de chinchard, Trachurus symmetricus murphy (Nichols) Report on the International Young Fish Survey in the North Sea, Skagerrak, and Kattegat in 1990 Distribution and growth of blue whiting in the North-
V	H:11 H:12 H:13 Ref.C+ H:14 H:15	L.I. Koval G T. Monstad	Fish resources in oceanic areas of the North Atlantic Etude du remplacement du contingent géniteur dans la population de chinchard, Trachurus symmetricus murphy (Nichols) Report on the International Young Fish Survey in the North Sea, Skagerrak, and Kattegat in 1990 Distribution and growth of blue whiting in the North-East Atlantic Some biological factors of blue whiting in the North-
₩	H:11 H:12 H:13 Ref.C+ H:14 H:15	L.I. Koval G T. Monstad T. Monstad B. Bogstad and	Fish resources in oceanic areas of the North Atlantic Etude du remplacement du contingent géniteur dans la population de chinchard, Trachurus symmetricus murphy (Nichols) Report on the International Young Fish Survey in the North Sea, Skagerrak, and Kattegat in 1990 Distribution and growth of blue whiting in the North-East Atlantic Some biological factors of blue whiting in the North-East Atlantic Estimation of predation mortalities on capelin using a

H:19 Ref.L	M.A. van der Land	Distribution and mortality of pelagic eggs of by-catch species in the 1989 egg surveys in the southern North Sea
H:20 Ref.L	A. Eltink	Horse mackerel egg production and spawning stock size in the North Sea in 1989
H:21 Sess.S		The choice of target fishing mortality in herring fisheries
H:22 a	nd H:23	Withdrawn.
H:24	E. Kirkegaard et al.	Report on the herring acoustic surveys in the North Sea, Skagerrak, and Kattegat during summer 1989
H:25 Ref.L	Amor Sola et al.	Seasonal occurrence of pelagic fish eggs and larvae in the Cantabrian Sea (VIIIc) and Galicia (IXa) from 1987 to 1989
H:26 Ref.L	L. Motos and J. Santiago	An egg production estimate of biomass of the Bay of Biscay anchovy, <u>Engraulis encrasicholus</u> L. in 1989
H:27 Ref.L	P. Lucio and, A. Uriarte	Aspects of the reproductive biology of the anchovy, Engraulis encrasicholus L . (1758) during 1987 and 1988 in the Bay of Biscay
H:28		Withdrawn.
H:29 Ref.L	L. Motos et al.	Results of the 1989 AZTI-SIO egg surveys on mackerel, <u>Scomber scombrus</u> , and horse mackerel, <u>Trachurus trachurus</u>
H:30	E. Kjørsvik <u>et</u> <u>al</u> .	On the inter-tidal spawning of Balsfjord herring ($\underline{\text{Clupea}}$ harengus)
н:31	M. Walsh <u>et al</u> .	Estimation of total potential fecundity and atresia in the Western mackerel stock 1989
H:32		Report of the Working Group on Herring Larvae Surveys South of $62^0\mathrm{N}$, 27 February - 2 March 1990
H:33	J.A. Jacobsen	Acoustic surveys on blue whiting north of the Faroes in August/September 1988 and 1989
H:34	J.A. Jacobsen	A survey on herring south of the Faroes in June 1990
H:35		Report of the Planning Group for Acoustic Surveys in ICES Sub-areas VIII and IX, Lisbonne, 29-31 May 1990
H:36 Sess.(Poster	J. Castro 2 <u>et al</u> .	Trophic relationships between skipjack tuna (<u>Katsuwonus pelamis</u>), chub mackerel (<u>Scomber japonicus</u>), and silversides (<u>Atherina presbyter</u>) in the area of the Canary Islands
H:37	M. Meixide	Results of the blue whiting otolith exchange
H:38	S.V. Belkov, D.M. Mahon and J. Molloy	Results of blue whiting investigations in the northeast Atlantic in spring, 1990

H:39 N.A. Isaev and D. Minchin Results of research on blue whiting to the west of the Irish coast in spring 1989

H:40

Report on the ICES Herring Larval Surveys in the North Sea and adjacent waters $% \left(1\right) =\left\{ 1\right\} =\left\{ 1\right\}$

REFERENCE PAPERS FOR THE PELAGIC FISH COMMITTEE

C:4, C:36, D:7, D:21, D:24, D:25, D:28, D:34, G:25, G:29, G:46, G:48, G:52, J:4, J:16, J:30, L:92, L:106, N:17

J - BALTIC FISH COMMITTEE

	J:1		Report of Activities, 1989
	J:2		List of Publications related to the interests of the Baltic Fish Committee $$
	J:3	R. Aps, L. Ustinova and B. Gentzen	Allometric growth of the Baltic sprat otoliths
	J:4 Ref.G+H	R. Aps et al.	Application of image analysis system in sprat otolith studies $ \\$
	J:5	T. Raid	On herring reproduction in the northeastern Baltic
	J:6	S. Shirokov	Dynamics of maturation of the Baltic sprat
	J:7	L. Ustinova	Growth of the juvenile Baltic sprat
-6	J:8	R. Aps	A century of Baltic sprat biology investigations: stock identification, recruitment, otoliths
-	J:9	R. Aps <u>et al</u> .	Microstructure of the Baltic cod otoliths
	J:10 Ref.L	T.I. Bulgakova and G.B. Grauman	${\tt A}\ \mbox{model}$ for the embryonal period in the Baltic cod life history
	J:11	M. Plikshs and E. Gradalev	Acoustic survey of the spawning stock of cod in the Eastern Baltic in 1989
~	J:12	W. Weber and U. Damm	Investigation on cod stomachs in the Western Baltic
	J:13 Ref.B	KJ. Stæhr and Th. Neudecker	Report on the acoustic survey in ICES Sub-divisions 22, 23, and 24 in November 1989
	J:14	K. Krenkel	Preliminary results of fecundity investigations of R-Rügen spring-spawning herring in 1988 and 1989
	J:15 Sess.0	N. Schulz	A new attempt to calculate consumption rates for cod (Gadus morhua) in the western Baltic
9	J:16 Ref.H	O. Rechlin	On the separation of catch projections for a stock with seasonal fisheries in different areas: herring assessment unit Division IIIa and western Baltic Sea
	J:17 Ref.D	M. Hildén and P. Kultalahti	Structural changes in the Finnish trawl fishery in the 1980s and the identification of fishing strategies
	J:18	W. Grygiel	The trends in Polish sprat landings and sprat biological characteristics in the Southern Baltic in the 1981-1986 period
	J:19	P. Margonski	Some aspects of straight-nosed pipefishes' (Nerophis $\underbrace{ophidion}_{}$ L.) biology in the Gdansk Bay

	J:20	J. Netzel	Cod migrations in Southern Baltic
	J:21	Th. Neudecker	Results of morphometric investigations on herring otoliths from the Western Baltic using an image analyser
	J:22	Th. Neudecker	Changes in growth of Western Baltic herring from 1982 to 1989 $$
6	J:23 Ref.L	R. Thiel	Community structure and niche relationships of young and small fish communities within the shallow water areas of a Baltic bay
. 1	J:24 and	J:25	Withdrawn.
	J:26 -	E. Ona and L.E. Palmen	The herring swimbladder and salinity; a comparison of Baltic and Norwegian spring spawning herring
W-1	J:27 Ref.C	E. Aro et al.	Estimation of Baltic cod eggs and larvae drift by two-layer, two-dimensional linear flow model
	J:28	E. Aro et al.	Estimation of changes in the abundance of Baltic herring and sprat stocks by combined hydroacoustic-trawl surveys in the Gulf of Finland in autumn, winter, and spring
A	J:29		Report of the Study Group on Young Fish Surveys in the Baltic, Tvärminne, Finland, 3-7 September 1990
	J:30 Ref.H	A. Müller, K. Muhsin and F. Köster	Ovarian maturation and batch fecundity in Baltic sprat from the Bornholm Basin, 1988
	J:31		Withdrawn.
	J:32	R. Parmanne and E. Kuittinen	The fecundity of herring in the northern Baltic Sea
	J:33		Withdrawn.
	J:34		Report of the Planning Group for Hydroacoustic Surveys in the Baltic, Copenhagen, 17-18 April 1990
	J:35	O. Hagström <u>et al</u> .	Acoustic estimates of the herring and the sprat stocks in the Baltic proper October 1989
	J:36	E. Steffensen and O. Bagge	The landings per unit effort of cod, plaice, flounder, dab, turbot, and brill in the western Baltic 1963-1989 as estimated from the Bagenkop fleet

REFERENCE PAPERS FOR THE BALTIC FISH COMMITTEE

E:4, E:21, G:29, G:30, G:52

K - SHELLFISH COMMITTEE

,	K:1		Report of Activities, 1989
1	K:2	Gro I. van der Meeren <u>et al</u> .	Large-scale release experiment of juvenile lobsters, Homarus gammarus, in Norway
	K:3	A. Nicolajsen and H. Eiriksson	A preliminary report on the reproductive cycle of <pre>Nephrops norvegicus</pre> at the Faroes
	K:4	B.I. Berenboim, A.I. Mukhin and G.K. Sheveleva	Soviet investigations of shrimp, <u>Pandalus borealis</u> , in the Barents Sea and off the Spitsbergen area in 1989
	K:5		Withdrawn.
	K:6 Ref.L	I.S. Wehrtmann	Larval production of <u>Crangon septemspinosa</u> in waters adjacent to Chesapeake Bay, USA, in relation to oceanographic conditions
	K:7	I.S. Wehrtmann and C. Stagg	Distribution of <u>Crangon septemspinosa</u> larvae off Chesapeake Bay, USA: a comparison of field data and the results of a larval transport model
	K:8 and	1 K:9	Withdrawn.
	K:10	C.C.E. Hopkins, J.R. Sargent and E.M Nilssen	Total lipid content, and lipid and fatty acid composition of the deep-water prawn <u>Pandalus borealis</u> from Balsfjord, northern Norway: growth and feeding relationships
	K:11 Ref. E+F	A. Bodoy et al.	Mass mortalities of oysters (<u>Crassostrea gigas</u>) during the spring 1988 in the Bay of Marennes-Oléron (Alantic coasts of France), related with environmental problems
	K:12		Withdrawn.
	K:13 Ref.F	R.C.A. Bannister et al.	The 1989 results from a lobster stock enhancement experiment on the east coast of England
	K:14 Sess.P	P. Walker, P.J. Dare and E. Clark	The potential of aerial photography for estimating intertidal stocks of mussels (<u>Mytilus</u> <u>edulis</u>) in the Wash, England
6	К:15	A.M. Caramelo and G. Pestana	An assessment of the shellfish Portuguese fishery (ICES Division IXa) and management strategies results
	K:16		Publications of interest to the Shellfish Committee,
H	K:17	Gro I. van der Meeren	Foraging activity in common shore crabs, Carcinus magnas on a blue mussel bed
l	K:18		Withdrawn.

6	K:19 Sess.Q Poster	C. Bacher	Trophic capacity of the Bay of Marennes-Oléron: coupling a model of transport of particulate matter and a model of growth of <u>Crassostrea</u> <u>qiqas</u>
	K:20	M. Héral, B.J. Rothschild and P. Goullet- quer	Decline of oyster production in the Maryland portion of the Chesapeake Bay: causes and perspectives
	K:21	O. Tully and J.P. Hillis	Spatial patterns of variability in length frequency distribution of ${\underline{\tt Nephrops}}$ in the Irish Sea
	K:22	J.P.Hillis and M. Geary	The Irish fishery for <u>Nephrops</u> on the Porcupine Bank
×. \	K:23 Ref.F	S. Andersen and K. Naas	Growth of scallop juveniles (<u>Pecten maximus</u>) in an enriched shallow sea water basin

REFERENCE PAPERS AND POSTER FOR THE SHELLLFISH COMMITTEE

D:18, D:34, E:32, N:8 (Poster)

L - BIOLOGICAL OCEANOGRAPHY COMMITTEE

	L:1 (+	Addendum)	Report of Activities, 1989
	L:2	J.H. Cowan, Jr. and E.D. Houde	Estimates of relative predation potential by medusae, ctenophores and fish on ichthyoplankton in Chesapeake Bay
	L:3	E.D. Houde	Temperature-dependent and size-dependent variability in vital rates of marine fish larvae
	L:4 Ref.C	A.G. Alexseeva, I.I. Svetlov and L.G. Balabanova	Effects of oceanographic conditions on primary production distribution in the Irminger Sea
	L:5, L:	6, and L:7	Withdrawn.
	L:8 Ref.C	R. Ian Perry et al.	The Georges Bank frontal system: mechanisms of plankton retention or dispersal
	L:9		Withdrawn.
	L:10 Sess.V	H. Auf dem Venne	Distribution of auto-, mixo, and heterotrophic plankton ciliates in the Greenland Sea in late spring and fall 1988
0	L:11 <u>Poster</u>	Y. Desaunay et al.	ZEBULON, a simple suprabenthic sampling gear for ichthyoplankton studies over the continental shelf
	L:12 Sess.R	E. Marchal, F. Gerlotto and B. Stequert	Scattering layer of micronekton, thermal structure and tuna abundance in the Atlantic equatorial current system
	L:13	K. Richardson and A. Christoffersen	Annual distribution and production of phytoplankton in the southern Kattegat
	L:14	B. Reguera, I. Bravo and S. Fraga	Distribution of <u>Dinophysis acuta</u> at the time of a DSP outbreak in the Rias of Pontevedra and Vigo (Galicia, NW Spain)
-	L:15 Sess.V	M.E. Huntley	Physiological rate measurements of zooplankton production rates - Beyond this broken promise
	L:16		Withdrawn.
	L:17 Sess.R	D.V. Holliday <u>et al</u> .	Acoustic assessment of zooplankton in the Irish Sea
1 =	, L: 18	P. Juel Hansen	The annual cycle of heterotrophic dinoflagellates in the Kattegat; with emphasis on the trophic role in the marine microbial food web
	L:19	T. Gissel Nielsen	Contribution of zooplankton grazing in the decomposition of a <u>Ceratium</u> bloom
	L:	16 R	community in the Southern

	L:20	M. Berman	Enhanced zooplankton processing with image analysis technology
	L:21		Withdrawn.
%	L:22	J. Kane and J. Green	Zooplankton biomass on Georges Bank 1977-1986
	L:23	K. Sherman,J. Jossi andJ. Goulet	Comparative stability of zooplankton communities of the Northeast US Shelf ecosystem and the North Sea ecosystem in relation to climatic variability
	L:24	K. Sherman	Large marine ecosystems as global units for management: an ecological perspective
. %	L:25 Sess.V	A. Bedo	Filter feeding by Appendicularians: various estimates of their grazing on <u>Synechoccus</u> sp. (cyanobacteria)
	L:26 Sess.V	C. Morales and R. Harris	A review of the gut fluorescence method for estimating ingestion rates of planktonic herbivores
0.	L:27 Sess.V	O.H. Haslund and M. Fryd	$\underline{\text{In}}\ \underline{\text{situ}}\ \text{measurements}$ of copepod production: a comparison of two methods
·)	L:28 Sess.Q Poster	P. Bernal et al.	A steady state trophic model for a highly productive embayment: Concepcion Bay, Chile
/	L:29 Sess.Q <u>Poster</u>	A. Yañez- Arancibia <u>et al</u> .	Trophic analysis of macrofauna, nektonic food consumption, and shrimp predation by fishes in Terminos Lagoon, Mexico
	L:30 Sess.Q Poster	P. Degnbol	The pelagic zone of central Lake Malawi - a trophic box model
/6		J.W. Baretta, P. Ruardij and A. Stam	Ems estuary ecosystem model
<i>'</i> ,		A. Cohen, R. Olivieri and F. Chavez B. E. Cohen and M. Fogarty	An ecosystem model of Monterey Bay, California (merged with L:33) 7 7 Willy drawin 3 A trophic model of Georges Bank
	L:35 Sess.Q Poster	K. Ruddle and V. Christensen	A quantitative energy flow model of the Mulberry Dike - Carp pond integrated farming system of the Zhujiang Delta, Guangdong Province, People's Republic of China
/0	L:36 Sess.Q Poster	M.L.Palomares et <u>al</u> .	A trophic model of a Mediterranean lagoon, Etang de Thau, France

	L:37 Sess.Q Poster	P. Schalk et al.	Towards a conceptual model for the Antarctic marine ecosystem $% \left(1\right) =\left(1\right) \left(1\right$
0	L:38 Sess.Q Poster	S. Opitz	A quantitative steady-state model of the trophic inter- actions in a Carribean coral reef ecosystem
/	L:39 Sess.Q Poster	S. Pisanty	The ecosystem of Lake Kinneret, Israel
	L:40 Sess.Q Poster	L. Arbaca- Arenas and E. Valero-Pacheco	First approach for a trophic model for Tamiahua, a coastal lagoon in Mexico
/	L:41 Sess.Q Poster	G. Silvestre et al.	A trophic model of the shallow-water fisheries resources of Brunei Darussalam, South China Sea
1	L:42 Sess.Q Poster	C.M. Aravindan	Trophic relationships of major food fishes in a semi- enclosed estuary of the southwest coast of India
1	L:43 Sess.Q Poster	W. Silvert	Size-structured models of continental shelf food webs
	L:44		Withdrawn.
%	L:45 Sess.Q Poster	R. Santhanam, A. Srinivasan and M. Devaraj	Trophic model in an estuarine ecosystem of the southeast coast of India
1	L:46 Sess.Q Poster	R. Jones and E.W. Henderson	The detrital cycle and its interaction with higher trophic levels
·/ ,	L:46 Sess.Q	and E.W. Henderson J.G. Pope,	
10	L:46 Sess.Q Poster L:47 Sess.Q	and E.W. Henderson J.G. Pope, P. Bromley and J. Last	trophic levels
	L:46 Sess.Q Poster L:47 Sess.Q Poster	and E.W. Henderson J.G. Pope, P. Bromley and J. Last nd L:49 A. Jarre	trophic levels A steady-state trophic model of the North Sea
	L:46 Sess.Q Poster L:47 Sess.Q Poster L:48 a L:50 Sess.Q	and E.W. Henderson J.G. Pope, P. Bromley and J. Last nd L:49 A. Jarre and D. Pauly E.A. Chavez, M. Garduño and	trophic levels A steady-state trophic model of the North Sea Withdrawn.

1.	L:53 Sess.Q <u>Poster</u>	F. Arreguin- Sanchez, E. Valero-Pacheco and E.A. Chavez	Trophic box model of a coastal fish community of the Western Gulf of Mexico
7	L:54 Sess.Q Poster	G. de la Cruz A	Trophic relationships in Mandinga Laboo Lagoon, Veracruz, Mexico
/	L:55 Sess.Q Poster	P.M. Alino et al.	An ecosystem model of a tropical reef flat in Santiago Island, Bolinao, Pangasinan, Philippines
1.	L:56 Sess.Q Poster	P. Reyes- Marchant <u>et al</u> .	A preliminary ecosystem model of an eutrophic lake (Lake Aydat, France)
%	L:57 Sess.Q Poster	F.A. Sanchez, J.C. Seijo and E. Valero- Pacheco	An application of ECOPATH II model for analysis of the marine community of the North Continental Shelf of Yucatan, Mexico
2	L:58 Sess.Q <u>Poster</u>	E.B. Christenser et al.	n San Miguel Bay, Philippines
•	L:59 Sess.Q <u>Poster</u>	J. Moreau, W. Ligtvoet and M.L. Palomares	Trophic relationship in the fish community of Lake Victoria, with emphasis on the impact of Nile perch Lates niloticus
*	L:60 Sess.Q <u>Poster</u>	R. Molinet et al.	A trophic model of Golfo Triste, Venezuela
•/	L:61 Sess.Q <u>Poster</u>	H. Masundire et al.	A trophic model for Lake Kariba, Zimbabwe
	L:62 Sess.Q <u>Poster</u>	B. Marshall	A trophic model of Lake McIlwaine, Zimbabwe
•	L:63		Withdrawn.
·/.	L:64 Sess.Q <u>Poster</u>	A.A. van Dam, B.A. Costa- Pierce and F. Chikafum	Trophic interactions in a napier grass (<u>Pennisetum purpureum</u>)-fed aquaculture pond in Malawi
	L:65 Sess.Q Poster	R.P. Noble and S. Chimatiro	Resource flows in crop-pond aqua ecosystems in Malawi
~	L:66 Sess.Q <u>Poster</u>	A.D. Pongase	Efficient aggregation of boxes in trophic ecosystem models
	L:67 Sess.Q Poster	D. Pauly and V. Christensen	Three new approaches for the graphical representation of box models of ecosystems

	L:68 Sess.Q Poster	V. Christensen and D. Pauly	The ECOPATH II Model
	L:69 Sess.Q Poster	V. Christensen and D. Pauly	Global comparison
9	L:70 Sess.Q Poster	U.S. Amara- singhe	An energy-flow model of Parakrama Samudra, an ancient reservoir in Sri Lanka
<i>*</i> /	L:71 Sess.Q Poster	A.D. Buijse et al.	A trophic model for IJsselmeer (The Netherlands) - a shallow eutrophic lake $% \left(1\right) =\left(1\right) +\left(1\right)$
%	L:72 Sess.Q Poster	C. de la Cruz et al.	Steady-state models of a rice paddy ecosystem with and without fish $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1$
<i>%</i>	L:73 Sess.Q Poster	V. Christensen and D. Pauly	Size-specific predation and "box" modelling
	L:74 Sess.V		Latitudinal patterns in biomass and diversity profiles of planktonic and micronektonic communities in the northeastern ${\tt Atlantic}$
	L:75 Sess.V	W. Greve	Simulation-supported sequential synoptic sampling
	L:76		Withdrawn.
	L:77 Sess.V	B.I. Bergström, A. Gustavsson and J.O. Ström- berg	Determination of abundance of gelatinous plankton with a remotely operated vehicle (ROV)
	L:78 Sess.V	HJ. Hirche	Towards a model of egg production in $\underline{\text{Calanus}}\ \underline{\text{fin-marchicus}}$ laboratory and field observations
	L:79 Sess.V	J.C. Roff and J.A. Berges	An enzyme index of zooplankton growth rate
	L:80 Sess.V	H.G. Fransz	Life cycle and production in Antarctic epipelagic copepods
	L:81 Sess.V Ref.Sess	D. Sameoto et al. s.R	Use of multiple frequency acoustics and other methods in estimating copepod and euphausiid abundance and biomass
	L:82		Withdrawn
1	L:83 Sess.V	B. Hansen	Functional relationship, particle retention, and selectivity of phytoplankton by planktotrophic benthic larvae exemplified by a gastropod veliger

	L:84 Sess.V	N. Swanberg U. Båmstedt and L.P. Madin	Assessing the role of gelatinous zooplankton in the marine environment - a critique
	L:85	G.P. Arnold, B.H. Holford and S.P. Milligan	Acceptance characteristics of the Lowestoft high speed plankton samplers: the conical nose cone
	L:86	J.G. Braun <u>et al.</u>	Preliminary observations on picoplankton biomass in Canary Islands waters
	L:87	C. Garcia- Ramos <u>et al</u> .	Seasonal distribution of zooplankton in Canary Island waters in the upper 200 metres
	L:88	J.M. Rodriguez et al.	First approach to the knowledge of ichthyoplankton in the Canary Island waters: spatial and temporal variability of ichthyoplankton abundance and zooplankton biomass
	L:89	A. Röpke, U. Piatkowski and W. Welsch	A comparative study on the vertical distribution of fish and cephalopod larvae in three hydrographically and ecologically different areas of the Arabian Sea (preliminary results)
	L:90	R. Fröse et al.	Development of an underwater video system for recording of ichthyoplankton and zooplankton
	L:91	R. Fröese	Growth strategies of fish larvae
	L:92 Ref.F+G	R. Fröese +H	Presentation of a biological database for species of current or future importance to aquaculture or fisheries
	L:93	J.W. Jossi and J. Goulet	Zooplankton community abundance coherence and stability of the Northeast Shelf ecosystem
%	L:94 Sess.P	J.W. Campbell and T. Aarup	Ocean color applications in 1990: surviving the data gap
	L:95		9th Report of the Benthos Ecology Working Group, Lisbon, 9-12 May 1990
	L:96		Report of the Working Group on Recruitment Processes, Nantes, 26-28 June 1990
	L:97	M. Kloppmann	The sampling efficiency of a horizontally towed Bé multiple-opening-closing-net
	L:98	C. Clemmesen	Improvements in the fluorimetric determination of the RNA- and DNA-content in individual marine fish larvae
. 4	L:99	B. Ueberschär and C. Clemmensen	A comparison of the nutritional condition of herring larvae as determined by two biochemical methods -tryptic enzyme activity and RNA/DNA ratio measurement
	L:100 Ref.G	B. Ellertsen and P. Solemdal	Spawning strategy and a mechanism for adaptive larval production in Arcto-Norwegian cod
•	L:101 Poster	K.W. Estep and F. Rey	Interactive computer taxonomy of marine algae
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	7		•
\	L:102 Poster	T. Noji and K. Estep	Protistan associations with fecal pellets
	L:103 <u>Poster</u> Ref. Mini-Sy	KG. Barthel	Benthic activity and respiration in a northern Norwegian fjord in late autumn
<i>'</i> ,	L:104 Sess.V	J.A. Runge	Egg production rates of $\underline{\text{Calanus}}\ \underline{\text{finmarchicus}}\ \text{in the Gulf}$ of St. Lawrence
<i>-</i> ,	L:105		List of publications of interest to the Biological Oceanography Committee, 1989
	L:106 Ref.H	J.A. Morrison, J.C. Gamble and C. Shand	Mass mortality of spring spawning herring eggs in Scottish waters
	L:107	A. Corten	Efficiency measurements of Gulf III and HAI plankton samplers in a towing tank $$
	L:108	S. Alshuth	Respiration and excretion rates of copepods from the Northwest Atlantic Ocean
·,	L:109 Sess.V	M.R. Roman and A.L. Gauzens	Size distribution analysis of zooplankton biomass using image analysis
	L:110		Withdrawn.
	L:111 Ref.Pub		Report of the Editor of the Plankton Identification Sheets
2	L:112 Sess.Q Poster	J. Csirke	Simplified trophic interactions in the Northern Patagonia and Bonaerensis area in the Southwest Atlantic
2	L:113 Sess.Q Poster	S. Barnard	Trophic dynamics in a gravel pit lake ecosystem
	L:114		Withdrawn.
	L:115 Sess.Q Poster	R. de Paula E Silva <u>et al</u> .	Fisheries productivity modelling of Maputo Bay, Mozambique
	L:116 Sess.Q <u>Poster</u>	J.A. Browder	Trophic flows and organic matter budget, Gulf of Mexico continental shelf

REFERENCE PAPERS FOR THE BIOLOGICAL OCEANOGRAPHY COMMITTEE

C:28, C:36, G:27, G:50, H:18, H:19, H:20, H:25, H:26, H:27, H:29, J:10, J:23, K:6, K:7, Poll:7

M - ANADROMOUS AND CATADROMOUS FISH COMMITTEE

	M:1		Report of Activities, 1989
	M:2		Report of the Study Group on the Norwegian Sea and Faroes Salmon Fishery, Copenhagen, 12-15 March 1990
	M:3		Report of the Study Group on the North American Salmon Fisheries, Halifax, Nova Scotia, 26 February - 2 March 1990
	M:4		ICES Compilation of Microtag, Finclip, and External Tag Releases in 1989 $$
•	M:5	E.D. Houde and L.G. Morin	Temperature effects on otolith daily increment deposition in striped bass and white \ensuremath{perch}
	M:6	V.A. Anokhina and N.K. Vorobieva	Comparative characteristics of developing eggs and early life stages of Atlantic salmon $(\underline{Salmo}\ \underline{salar}\ L.)$ from different rivers
	M:7	T.K. Lebskaya <u>et al</u> .	Dynamics of biochemical indices for reared juveniles of Atlantic salmon (\underline{Salmo} \underline{salar} L.) during smoltification
	M:8	A.V. Zubtchenko, A.F. Sharov and O.G. Kuzmin	Atlantic salmon of the River Tuloma as the salmon stock index of the Barents Sea basin
	M:9	A.F. Sharov	Simulation model of Atlantic salmon population
	M: 10		Withdrawn.
	M:11		List of publications related to the interests of the
	P1: 11		Anadromous and Catadromous Fish Committee, 1989
	M:12	M. Hildén and S. Kuikka	-
	M:12 Sess.	S. Kuikka R. Trzebiatowski	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in
·/-	M:12 Sess. S	S. Kuikka R. Trzebiatowski	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in Finland Efficiency of stocking small streams with the sea trout
· · ·	M:12 Sess. S	S. Kuikka R. Trzebiatowski and J. Domagala C. Eriksson	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in Finland Efficiency of stocking small streams with the sea trout (Salmo trutta L.) hatch of different age Experimental tagging of young salmon (Salmo salar L.) and sea-trout (Salmo trutta L.) with different types of
· · · · · · · · · · · · · · · · · · ·	M:12 Sess. S M:13	S. Kuikka R. Trzebiatowski and J. Domagala C. Eriksson V.A. Pepper and	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in Finland Efficiency of stocking small streams with the sea trout (Salmo trutta L.) hatch of different age Experimental tagging of young salmon (Salmo salar L.) and sea-trout (Salmo trutta L.) with different types of the Carlin tag Coded wire microtagging of Atlantic salmon (Salmo salar
	M:12 Sess. S M:13 M:14	S. Kuikka R. Trzebiatowski and J. Domagala C. Eriksson V.A. Pepper and M.F. O'Connell	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in Finland Efficiency of stocking small streams with the sea trout (Salmo trutta L.) hatch of different age Experimental tagging of young salmon (Salmo salar L.) and sea-trout (Salmo trutta L.) with different types of the Carlin tag Coded wire microtagging of Atlantic salmon (Salmo salar L.) in Newfoundland, Canada A model of survival and growth of striped bass larvae,
0/0 0/0 0/0 0/0	M:12 Sess. S M:13 M:14 M:15 M:16	S. Kuikka R. Trzebiatowski and J. Domagala C. Eriksson V.A. Pepper and M.F. O'Connell E.J. Chesney	Anadromous and Catadromous Fish Committee, 1989 The analytical hierarchy process as a tool for analysing the perceptions of the salmon management problem in Finland Efficiency of stocking small streams with the sea trout (Salmo trutta L.) hatch of different age Experimental tagging of young salmon (Salmo salar L.) and sea-trout (Salmo trutta L.) with different types of the Carlin tag Coded wire microtagging of Atlantic salmon (Salmo salar L.) in Newfoundland, Canada A model of survival and growth of striped bass larvae, Morone saxatilis, in the Potomac Riover, 1987 Relative decline of sample total weight in seawater

-	M:20	I.C. Russell <u>et al</u> .	Recoveries of coded wire microtags from salmon caught at West Greenland in 1989
%	M:21	I. Borzecka, E. Ikonen and I. Torvi	Attempts of using the discriminant function based on scale structure of Baltic salmon to distinguish between the wild and hatchery-reared smolts
%	M:22	M. Hildén	Salmon stocks and management advice - assessing the assessment reports
0	M:23	W.S. Davidson et al.	A polymorphism in the ribosomal RNA genes distinguishes Atlantic salmon (\underline{Salmo} \underline{salar} L.) from North America and Europe

REFERENCE PAPERS FOR THE ANADROMOUS AND CATADROMOUS FISH COMMITTEE

D:17, F:51, F:55, F:64, F:75

N - MARINE MAMMALS COMMITTEE

	N:1		Report of Activities, 1989
	N:2	R. Duguy	Rapport annuel sur les Cétacés et Pinnipèdes trouvés sur les côtes de France en 1989
	N :3	R. Duguy	Variation de fréquence chez les Cétacés échoués sur les côtes de France au cours des 10 dernières années 1980- 1989
	N:4 <u>Poster</u>	V.A. Potelov	The abundance and state of the stock of harp seals and hooded seals in the Greenland ${\sf Sea}$
	N:5	J. Sigurjónsson and T. Gunnlaugsson	Distribution and abundance of cetaceans in Icelandic and adjacent waters during sightings surveys July-August 1989
	N:6	T. Haug et al.	Harp seal (\underline{Phoca} $\underline{qroenlandica}$) invasions in north Norwegian coastal waters: a preliminary report on age composition and feeding habits
	N:7		Withdrawn.
	N:8 Ref.K Poster	H. Martins, Malcolm Clarke and P. Pascoe	Squid in the diet of sperm whales off the Azores
	N:9	G. Garcia- Castrillo <u>et al</u> .	Les mammifères marins du nord de l'Espagne en 1989
)	N: 10	I. Christensen, T. Haug and N. Øien	A review of the distribution, migrations, food, reproduction, exploitation and present abundance of humpback whales (Megaptera novaeangliae) in the Northeast Atlantic
	N:11 Ref.G	K.T. Nilssen, P.E. Grotnes and T. Haug	The effect of invading harp seals ($\underline{Phoca\ groenlandica}$ on local coastal fish stocks of North Norway
	N:12 Ref.E	O. Stenman and A. Tissari	Organochlorines in Baltic seals in 1980s
	N:13	O. Stenman	Les populations de phoques dans le Golfe de Finlande au cours des années 1980
	N:14 Ref.E Sess.T		Report of the Joint Meeting of the Working Group on Baltic Seals and the Study Group on the Effects of Con- taminants on Marine Mammals, Stockholm, 14-17 May 1990
	N:15		List of publications of interest to the Marine Mammals Committee, 1989 $$
	N:16		Withdrawn.

N:17 R.R. Lick RefG+H First record of fish intermediate hosts of Contra-caecum spp. larvae, probably C. osculatum. Rudolphi 1802, an anisakine nematode maturing in pinnipeds, in the German Wadden Sea

N:18 J. Beard et al. (N. sien)

 $\label{eq:conditional} \mbox{YonAH: years of the North Atlantic humpback whale. A proposal for discussion}$

Withdrawn.

MINI-SYMPOSIUM ON BENTHIC ECOLOGY OF THE NORTH SEA

<i>\</i>	Mini:1	A. Eleftheriou and C. Heip	Planning and execution of the North Sea Benthos Survey
	Mini:2	A. Künitzer <u>et al</u> .	The benthic infauna of the North Sea: species distribution and assemblages $% \left(1\right) =\left(1\right) \left(1\right)$
	Mini:3	I. Kröncke	Macrofauna standing stock of the Dogger Bank. A comparison: 1950-1954 versus 1985-1987
	Mini:4	H.L. Rees et al.	Spatial and temporal trends in the benthos and sediments in relation to sewage sludge disposal off the northeast coast of England
	Mini:5	U. Niermann	Oxygen deficiency in the southeastern North Sea in summer 1989
9	Mini:6	A. Eleftheriou	The sedimentary environment of the North Sea
•	Mini:7	P.F. Kingston	Impact of offshore oil production installations on the benthos of the North Sea
	Mini:8	R. Huys and C. Heip	Meiofauna of the North Sea Benthos Survey
	Mini:9	G. Duineveld and G.J. van Noort	Geographical variation in the epifauna of the southern North Sea and adjacent regions
	Mini:10	C. Heip et al.	Statistical analysis and trends in biomass and diversity of North Sea macrofauna
	Mini:11	M. Bergman et al.	Direct effects of commercial beamtrawl fishing on benthic fauna in the North Sea

REFERENCE POSTER FOR THE MINI-SYMPOSIUM

L:103	C. Noji,	Benthic activity and respiration in a northern Norwegian
Poster	T. Noji and	fjord in late autumn
	K.G. Barthel	

PAPERS AND POSTERS FOR THEME SESSIONS

The Consumption Rate in Marine Fish (O) Convener: Mr. H. Sparholt, (Denmark) F:8, G:3, G:6, G:11, G:16, G:17, G:18, G:19, G:22, G:31, G:34, G:35, G:36, G:51, G:63, G:69, J:15

Remote Sensing Applications in Monitoring Programmes (P) Convener: Dr R. Dörffer (Federal Republic of Germany)

B:13, C:11, C:12, C:14, C:15, C:29, C:33 (Poster), C:37, C:41, C:42, E:19, H:9, K:14, L:94

<u>Poster Session on Trophic Models of Marine Ecosystems(Q)</u> Conveners: Dr D. Pauly (Federal Republic of Germany) and Mr V. Christensen (Denmark)

G:4, H:36, K:19, L:28 to and including L:47, and L:50 to and including L:73, L:112, L:113, L:115, L:116

Acoustic Methods (R) Convener: Dr J.Traynor (USA)

B:2, B:4, B:9, B:10, B:11, B:12, B:21, B:22, B:23, B:24, B:30, B:31, B:33, B:38, B:40, B:41, B:49, B:50, J:26, L:12, L:17 (Ref. from Session V: L:81)

<u>ACFM and Associated Working Group Reports</u> (S) Convener: Mr. D. de G. Griffith, (Ireland)

Assess:1 to Assess:25 included, and Assess:28 and 29; G:10, G:70, H:3, H:21, M:12

ACMP and Related Working Group Reports (T) Convener: Mr J. Jakobsson (Iceland)
Poll:1 to and including Poll:7; C:8, E:28, F:12, F:13, N:14

Fishing Gear Selectivity (U) Convener: Mr D.N. MacLennan (UK) B:3, B:14, B:26, B:27, B:28, B:34, B:46, G:54, G:55

Recent Developments in the Measurement of Zooplankton Production Rates and Biomass Characteristics (V) Conveners: Dr J. Gamble (UK) and Mr H. Skjolddal (Norway)

L:10, L:15, L:25, L:26, L:27, L:74, L:75, L:77, L:78, L:79, L:80, L:81 (Ref. to Session R), L:83, L:84, L:104, L:109

ACFM - ADVISORY COMMITTEE ON FISHERY MANAGEMENT

ACFM: 1*	Agenda, ACFM Consultations at the 1990 Statutory Meeting, 3 October 1990 $$
ACFM: 2*	Draft Agenda, ACFM, 30 October - 7 November 1990
ACFM:3*	Draft Proposal from ACFM: Terms of Reference for ACFM and Assessment Working Groups in 1991

^{*}For the relevant Committee only.

ASSESSMENT WORKING GROUPS REPORTS 1990

Assess:1	Report of the Working Group on Multispecies Assessment of Baltic Fish, Moscow, 4-8 September 1989
Assess:2	Report of the Irish Sea and Bristol Channel Working Group, Copenhagen, 13-19 September 1989
Assess:3	Report of the Blue Whiting Assessement Working Group, Copenhagen, 13-19 September 1989
Assess:4	Report of the Arctic Fisheries Working Group, Copenhagen, 19-28 September 1989
Assess:5	Report of the Atlanto-Scandian Herring and Capelin Working Group, Copenhagen, 16-20 October 1989
Assess:6	North Sea Flatfish Working Group, Copenhagen, 20-26 October 1989
Assess:7	Report of the Roundfish Working Group, Aberdeen, 12-14 October 1989.
Assess:8	Report of the Working Group on Harp and Hooded Seals, Bergen, 16-19 October 1989
Assess:9	Report of the Working Group on Assessment of <u>Pandalus</u> Stocks, Copenhagen, 12-16 February 1990
Assess:10	Report of the Division IIIa Demersal Stocks Working Group, Copenhagen. 28 February - 6 March 1990
Assess:11	Report of the Working Group on North Atlantic Salmon, Copenhagen, 15-22 March 1990
Assess:12	Report of the Working Group on Cod Stoks off East Grenland, Hamburg, 21-27 February 1990
Assess:13	Report of the Industrial Fisheries Working Group, Copenhagen, 20-27 March 1990
Assess:14	Report of the Herring Assessment Working Group for the Area South of $62^{0}\mathrm{N}$, Copenhagen, 27 March - 6 April 1990
Assess:15	Report of the Working Group on Methods of Fish Stock Assessments, Nantes, 10-17 November 1989
Assess:16	Report of the Working Group on Nephrops, Nantes, 21-28 March 1990
Assess:17	Report of the Working Group on Assessment of Demersal Stocks in the Baltic, Copenhagen, 17-26 April 1990
Assess:18	Report of the Working Group on Assessment of Pelagic Stocks in the Baltic, Copenhagen, 17-26 April 1990
Assess:19	Report of the Mackerel Working Group, Copenhagen, 24 April - 2 May 1990

Assess: 20	Report of the North-Western Working Group, Copenhagen, 1-8 May 1990
Assess:21	Report of the Baltic Salmon and Trout Assessment Working Group, Copenhagen, 7-14 March, 1990
Assess:22	Report of the Working Group on the Assessment of the Stocks of Hake, Copenhagen, 1-10 May 1990
Assess:23	Report of the Working Group on Fisheries Units in Sub-areas VII and VIII, Nantes, 13-20 June 1990
Assess:24	Report of the Working Grup on the Assessment of Sardine, Horse mackerel, and Anchovy, Copenhagen, 20-29 June 1990
Assess: 25	Report of the Working Group on Multispecies Assessments of Baltic Fish, Gdynia, 6-10 August 1990
Assess: 26	Transferred to 1991.
Assess:27	Transferred to 1991.
Assess:28	Report of the Special Meeting of the Multispecies Assessment Working Group, Bergen, 23-27 April 1990
Assess:29	ACFM comments on stock assessment working group reports: a supplement (for working groups) to the ACFM minutes of November 1989 and May 1990

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ACMP - ADVISORY COMMITTEE ON MARINE POLLUTION

ACMP: 1*	Agenda for the Advisory Committee on Marine Politicion - Consultations Meeting, 3 October 1990
ACMP: 2*	Work Programme from the Oslo and Paris Commissions
ACMP: 3*	Requests from the Helsinki Commission
ACMP: 4*	Tasks for Study/Working Groups reporting to ACMP
ACMP: 5*	Report on the Statistical Analysis of CMP Data on Contaminants in Fish Liver and Mussels
ACMP: 6*	Critical Review of Contaminants in Sediments
ACMP: 7*	Results of the ICES Baseline Study on Trace Metals in Coastal and Shelf Waters

^{*}For the relevant Committee only.

POLLUTION-RELATED WORKING GROUP REPORTS

Poll:1 Ref. C and E	Report of the Marine Chemistry Working Group, Copenhagen, 12-16 February 1990
Poll:2 Ref. C and E	Report of the Working Group on the Baltic Marine Environment, Tallinn, 10-12 April 1990
Poll:3 Ref. E	Report of the Working Group on Marine Sediments in Relation to Pollution, Lisbon, 3-6 April 1990
Poll:4 Ref. E	Report of the Working Group on the Biological Effects of Contaminants, Nantes, 24-27 April 1990
Poll:5 Ref.E	Report of the Working Group on Environmental Assessments and Monitoring Strategies, Charlottenlund, Denmark, 23-27 April 1990
Poll:6 Ref. D + E	Report of the Working Group on the Statistical Aspects of Trend Monitoring, Copenhagen, 30 April - 4 May 1990
Poll:7 Ref.F + L	Report of the Working Group on Phytoplankton and the Management of their Effects, Oban, Scotland, 3-7 April 1990

