CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

MH/MH

Votre réf.:

From 1 January 1980

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Au suie! :

Notre réf.: Dl.a/80

November 1980

Dear Sirs.

Please find enclosed the documents requested - to the extent available - of 1980 Council Meeting papers.

If you require photocopies of papers which were not included in the set we are sending to you, please do not hesitate to inform us and we shall then forward them with an invoice to cover the cost of photocopying and mailing.

However, we wish to draw your attention to the following papers which were withdrawn:

Statistics Cttee:

D:8

MEQC:

E:2, E:62 and E:66

Mariculture Cttee:

F:11, F:13, F:14, Note that F:19 was a

Poster and no paper exists; F:24 and F:25

Demersal Fish

Cttee:

G:16, G:17, G:20 and G:41

Pelagic Fish Cttee:

Shellfish Cttee:

H:27 K:19

Biol.Oceanogr.

Cttee:

L:34, L:41, L:42 and L:43; Note that L:53, L:54

and L:55 were Posters

Anacat Cttee:

M:31

Further, the below-mentioned papers are not enclosed, because they were intended for members of the relevant Committees only:

C:47, D:19 M: 26

Yours faithfully

ICES SECRETARIAT

Contributions to be presented at the Statutory Meeting.

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Documents are coded for different Committees in accordance with their terms of reference and instructions given by the governing bodies from time to time.

In some cases a paper is coded to one Committee and reference is made to one or more other Committees. The intention is to ensure that members of both (all) Committees receive copies in advance. The Chairmen concerned will agree as to the presentation in the Committees. Presentation of the same material in more than one Committee should be avoided.



### Gen - General Assembly Reports and Papers of General Interest

Gen:1		"Report by Observers from collaborating Organisations" (with Addendum 1).
Gen:2		Withdrawn.
Gen:3		"Activities of the International Council for the Exploration of the Sea 1979/80".
Gen:4 (Symp.)	J M Bewers and P A Yeats	"Transport of metals through the coastal zone.".
Gen:5 (Symp.)	D F Jefferies, R J Pentreath and J W Talbot	"Transport processes in the Irish Sea as indicated by the measure- ment of radionuclides released from Windscale".
Gen:6		"Report of the <u>ad hoc</u> Working Group Meeting in Sea-Bed Charting".
Gen:7	Compiled by ICES Hydrographer	"Catalogue of regularly issued marine environmental data products for the ICES area. 1980 issue".
Gen:8 (Symp.)	R Wollast and J J Peters	"Results on material transports in estuarine zones".
Gen:9		"Advance Release of Tables 1-5 and K of Bulletin Statistique, Vol.64, 1979".
Gen:10		"Elections of Committee Chairmen at the 68th Statutory Meeting". (E+F)
Gen:11		"Notes on Recommendations and Reports". (E+F)

### Del - DELEGATES MEETINGS

Del:1*	"Audited accounts for 1978/79 with balance sheet as per 31/10 1979".
Del:2*	"Preliminary report on the administration 1979/80".
Del:3*	"Administrative reports of area- and subject committees 1980".
Del:4*	"Estimated accounts for the financial year 1979/80".
Del:5*	"Budget for the financial year 1980/81". $(E+F)$
Del:6*	"Forecast budget for the financial year 1981/82". (E+F)
Del:7*	"Proposals for amendment of the Rules of Procedure". (E+F) $$
Del:8*	"Analysis of the Council's finances".
Del:9*	"Elections to be undertaken by the Council at the 68th Statutory Meeting". $\left(E+F\right)$
Del:10*	"Report on a 'Dialogue Meeting', 20-21 May 1980, held under the auspices of ICES".

^{*} For Delegates only

⁽E+F) = in English and French

#### Fi - FINANCE COMMITTEE

Fi:1* Agenda for the Finance Committee.

Fi:2* "Writing-off of non-received payments".

#### ACFM - ADVISORY COMMITTEE ON FISHERY MANAGEMENT

ACFM:1*

Agenda for the Advisory Committee on Fishery Management.

#### ACMP - ADVISORY COMMITTEE ON MARINE POLLUTION

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ACMP:1*		Agenda for the Advisory Committee on Marine Pollution.
ACMP:2*		"Requests for advice from the Oslo and Paris Commissions to ICES".
ACMP:3*		"Review of site selection criteria for dumping at sea (in Coop.Res. Rep., No.76)".
ACMP:4*	H Compaan	"Incineration of chemical wastes at sea - a short review".
ACMP:5*		"The ICES Coordinated Monitoring Program 1978 (revised)".
ACMP:6*	J B Pearce	"Scientific studies in response to an oil pollution incident".
ACMP:7*		"Draft executive summary of the report 'Assessment of the Effects of Pollution on the Living Resources of the Baltic Sea".
ACMP:7a*		"Overall conclusions for the document: 'Assessment of the Effects of Pollution on the Natural Resources of the Baltic Sea', July 1980 draft; accepted by the Scientific- Technological WG of the Helsinki Commission as an alternative to the draft in ACMP:7*"(above).

^{*} For the relevant Committees only.

#### Pub - PUBLICATIONS COMMITTEE

Pub:1*	Agenda for the Publications Committee.
Pub:2*	"Sale of ICES publications during the last three years".
Pub:3*	"Review of the publications".
Pub:4*	"Promotion of distribution of Journal du Conseil, etc.".
Pub:5*	"Policy concerning publication of invited lectures for the Opening Sessions".

#### A - CONSULTATIVE COMMITTEE

A:l*

Agenda for the Consultative Committee.

 $[\]ensuremath{^{*}}$  For the relevant Committees only.

### B - FISH CAPTURE COMMITTEE

B:1		Administrative Report.
В:2		"Report of the Working Group on Research on Engineering Aspects of Fishing Gear, Vessels and Equipment".
B:3	G Thorsteinsson	"Icelandic bottom trawl and Danish seine codend selection experiments on cod, haddock, redfish and plaice in 1972-76".
B:4 Ref. Shellfish Cttee	G Thorsteinsson	"On the influence of mesh size and hanging ratio on the escape of <u>Pandalus</u> borealis through the side panels of a 4-seam bottom trawl".
B:5	A Agústsson and E Ragnarsson	"Fuel consumption of the Icelandic fishing fleet".
B:6	G Kurc	"Rapport général sur les réunions des Groupes de Travail du Comité pour la Capture des Animaux marins, Reykjavik, Islande du 5 au 9 mai 1980".
		"General Report - Fish Capture Committee Working Groups - Reykjavik (Iceland), 5 to 9 May 1980".
B:7 Ref. Shellfish Cttee	V A Sakhno and M K Sadokhin	"Investigation on bottom trawl selectivity in relation to the Barents Sea shrimp <a href="Pandalus">Pandalus</a> <a <="" a="" href="borealis">.</a>
B:8 Ref. Baltic Fish Cttee	H Bohl	"Selection of cod by bottom trawl codends in the central Baltic (German experiments 1978)".
В:9	J C Brabant, N Prado and E Dahm	"Comparative fishing trials with big meshes and rope trawls".
B:10		"First report of the Planning Group for the Symposium on Fisheries Acoustics".
B:11	P Berthou et J-Y Le Gall	"Sélectivité de la drague à praires ( <u>Venus verrucosa</u> Mollusque Veneridae) en Manche occidentale".
B:12	R Robles, A Fernández and F J Pereiro	"Mesh selection of hake, blue whiting, horse mackerel, megrim, sole and Nephrops in nylon cod ends on Galicia and Portugal shelf".
B:13	R Shotton	"An analysis of the sensitivity of fish biomass estimates to the equivalent beam angle estimate".

Fish Capture Cttee	(ctd)	
B:14	A Endal	"Fuel saving potential in Norwegian fisheries".
B:15	T Digernes and A Endal .	"Fishing vessel speed and fuel economy".
B:16	D N MacLennan	"Code of practice for the conduct of fishing gear experiments"
B:17 Ref. Demersal and Pelagic Fish Cttees	E J Simmonds and S T Forbes	"Some range dependent variations affecting acoustic fish stock estimations".
B:18 Ref. Demersal and Pelagic Fish Cttees	J I Edwards	"A barge for the transport and storage of live fish".
B:19 Ref. Demersal and Pelagic Fish Cttees	J I Edwards	"A preliminary investigation of the target strength of herring".
B:20 Ref. Demersal and Pelagic Fish Cttees	S T Forbes, E J Simmonds and J I Edwards	"Progress in target strength measurements on live gadoids".
B:21	R De Clerck and G Vanden Broucke	"Preliminary results of selectivity experiments with beam trawls".
B:22 Ref. Shellfish Cttee	A Merrien	"Utilisation de la télévision sous- marine pour l'inventaire et l'estimation directe des ressources en coquilles Saint-Jacques. Ex.: la Baie de Saint-Brieuc".
B:23	J B Suomala Jr.	"Acoustic data in large-scale surveys".
B:24	J Prado et M Meillat	"Efficacité relative de deux types de palangre en mer d'Irlande".
B:25	A K Beltestad	"Recent experiments with net of hexagonal meshes in purse seines".
B:26 Ref. Demersal Fish Cttee	M Holm and A K Beltestad	"Behaviour of saithe penned in different densities".
B:27 Ref. Demersal Fish Cttee	G Rauck	"Mesh selectivity studies on board a low powered German sole beam trawler".
B:28 Ref. Biol. Oceanography Cttee	N Klages and F Nast	"The selection of Antarctic krill by the 1216 ★ krill trawl".

sh Capture Ctte	ee (ctd)	
B:29	J C Brabant	"Les modalités du contrôle des maillages".
B:30 Ref. Biol. Oceanography Cttee	M T Törmä	"Assessment of Antarctic krill catch rates using computer modelling".
B:31	J W Watson and W R Seidel	"Evaluation of techniques to decrease sea turtle mortalities in the southeastern shrimp fishery".
B:32		"Report of the Working Group on Reactions of Fish to Fishing Operations".

### Reference Papers to the Fish Capture Committee

G:28 Demersal Fish Cttee	K Hoydal, R Rørvik and P Sparre	"A method for estimating the effective mesh sizes and the effects of changes in gear parameters".
J:6 Baltic Fish Cttee	S E Shevtsov	"Selectivity of trawl cod-ends for flounder fishery in the Baltic Sea".
K:23 Shellfish Cttee	R P Briggs and P S Watson	"A comparison of catch composition with different net mesh sizes using a parallel haul technique in the Northern Ireland Nephrops fishery".

### C - HYDROGRAPHY COMMITTEE

C:1 Ref. MEQC		"Second report of the Marine Chemistry Working Group, Copenhagen, 12-14 February 1980".
C:2 Ref. Biol. Oceanography Cttee	Ed.: A Svansson	"Final report of the ICES/JONSIS Working Group on JONSDAP '76".
C:3 Ref. Biol. Oceanography Cttee	Ed.: G Pichot	"Papers presented at the JONSDAP '76 Meeting, Liège, 29 April - 2 May 1980".
C : 4		"Report of the Working Group on Oceanic Hydrography".
C:5	M Stein and H P Cornus	"Hydrographic conditions off Spitsbergen in summer 1979".
C:6	K P Koltermann	"Low frequency variations of the mass-field in the northern North Sea during JONSDAP '76".
C:7	A Bradley and P Tillier	"A mesoscale Lagrangian measurement system".
C:8	D J Ellett, D J Edelsten and D A Booth	"Measurement of a continental slope current west of Scotland".
C:9	D J Ellett	"Long-term water-mass variations in the North-eastern Atlantic".
C:10	T G Jensen and G Kullenberg	"Some results on the energy transfer from the wind to the water during BOSEX 77".
C:11 Ref. MEQC	E Buch and G Kullenberg	"On the mixing conditions in the Baltic Transition Area".
C:12	J Willebrand and J Meincke	"Statistical model of meso-scale temperature and current fluctuations over the Iceland-Faroe Ridge Slope".
C:13	E Mittelstaedt, Ch. Brockmann, I Hamann and G Weichart	"Eastern boundary undercurrents - Suppliers of upwelling waters along the coasts".
C:14	H Meier-Fritsch, E Mittelstaedt and Ch. Brockmann	"Coastal upwelling off Northwest Africa - a three-dimensional numerical model".
C:15		"Report of the Study Group on the Flushing Times of the North Sea - Meeting at Liège 27 April 1980".

Hydrography Cttee (ctd)			
C:16	U.S. NODC	"ROSCOP summary of U.S. cruises in the ICES Area 1979".	
C:17 Ref. Biol. Oceanography Cttee	S B Tijssen and A Eijgenraam	"Diurnal oxygen rhythm in the Southern Bight of the North Sea: net and gross primary production in April 1980 in a phaeocystis bloom".	
C:18	E Francke and D Nehring	"The beginning of the renewal of the deep water in the central basins of the Baltic in 1980".	
C:19	D Nehring	"On the mean nitrogen phosphorus ratio in the mixed winter surface layer of the Baltic".	
C:20	H U Lass, W Fennel, R Helm and M Sturm	"Variations of the current system in the Equatorial Atlantic at 28°40'W during FATE in May-June 1979".	
C:21	E Hagen and W Zahn	"On the influence of large scale winds upon meso-scale upwelling dynamics off NW Africa".	
C:22	J C J Nihoul, Y Runfola <u>et</u> <u>al.</u>	"The residual circulation of the North Sea".	
C:23	F Dehairs	"The biogeochemical cycle of barium in the open ocean: An evaluation".	
C:24	H Dedeurwaerder, M Dejonghe and F Dehairs	"Strategy for the study of sea-air exchanges in the Belgian coastal zone".	
C:25	H D Dooley and E W Henderson	"Low frequency currents north of Rockall Bank".	
C:26	Jens Smed	"Introduction to the hydrography section of Annales Biologiques, Vol.36 (for 1979)".	
C:27	0 V Olsen and J E Beyer	"Some aspects of modelling the water exchange in Kattegat".	
C:28	S-A Malmberg	"Hydrographical conditions in Icelandic waters in May-June 1979".	
C:29	J M Suijlen	"A dye experiment in the North Sea up to a very large scale".	
C:30	W J Gould and A N Cutler	"Long period variability of currents in the Rockall Trough".	
C:31	P L Richardson	"Gulf Stream system: the average temperature field at a depth of 450 m".	

## Hydrography Cttee (ctd)

C:32	ICES Hydrographer	"Activities of the ICES Service Hydrographique during 1979/80".
C:33	C A Dorkins	"Flow along the continental shelf south of Nantucket Island".
C:34	B Butman <u>et</u> <u>al.</u>	"The mean circulation on Georges Bank as measured by moored current meters".
C:35 Ref. Biol. Oceanography Cttee	S R Ramp, R J Schlitz and W Redwood Wright	"Northeast Channel flow and the Georges Bank nutrient budget".
C:36 Ref. MEQC	S H Fonselius	"On long time variations of phosphorus in Baltic surface water".
C:37	L Otto and D Eisma	"Questions regarding the assessment of the fluxes of suspended matter in the sea".
C:38	ICES Hydrographer	"Provisional programme of work for ICES Service Hydrographique 1980/81".
C:39	M S McCartney and L D Talley	"Warm water to cold water conversion in the northern North Atlantic and its relation to the general circulation".
C:40		"Report of the Working Group on Aerospace Remote Sensing".
C:41	ICES Hydrographer	"Catalogue of computer programmes in physical and chemical oceanography".
C:42		"Report of the Working Group on Shelf Seas Hydrography" (available only during Statutory Meeting).
C:43		"Report of the Working Group on Marine Data Management" (available only during the Statutory Meeting).
C:44		"Report of the Working Group on the Coordination of Hydrographic Investigations in the Baltic" (available only during Statutory Meeting).
C:45 C:46 C:47		

### Reference Papers to the Hydrography Committee

D:4	D L Cram and	"Some experience with an experimental
Statistics	M Mall	fisheries-oriented database".
Cttee		

# urography Cttee (ctd)

# reference papers

D:8 Statistics Cttee	E Collins	"Environmental impact/assessment studies - the problems of handling interdisciplinary data".
D:10 Statistics Cttee	J A Pope	"Some statistical techniques for looking at large data sets".
D:12 Statistics Cttee	P Geerders	"Introductory paper to the Joint Session of the Hydrography and Statistics Committees".
D:13 Statistics Cttee	M T Jones	"The MIAS Oceanographic Data Base - the development of a general purpose data structure for serial data".
D:14 Statistics Cttee	D P Kohnke	"Techniques for reducing large volumes of oceanographic data".
D:16 Statistics Cttee	E G Heyerdahl and R Payne	"A data management system for the northeast monitoring program, the requirements for a multi-discipline, multi-agency project".
D:17 Statistics Cttee	J Smed	"Distribution of oceanographic information to the ICES community".
D:20 Statistics Cttee	O Feddersen	"'Dana's' computer facilities. Dedicated system for on-board laboratory automation".
E:3 MEQC		"Report of the Coordinating Group on Sediments and Pollution, Texel, Netherlands, 25-26 February 1980".
E:18 MEQC	K Grasshoff and H P Hansen	"Small-scale variability of chemical parameters in the Baltic".
E:19 MEQC	J M Bewers <u>et al.</u>	"Design and logistical options for the conduct of the ICES Fifth Round Intercalibration for Trace Metals in Seawater".
E:34 MEQC	J C Duinker	"Processes affecting the behaviour of contaminants (metals and organochlorines) during estuarine mixing and in coastal areas, with particular reference to the southern North Sea"
G:21 ⊝emersal Fish ∋ttee	A A Glukhov <u>et al.</u>	"Some results of the Soviet investigations of deep-water fish supply in the Faroe economic zone in 1979".
H:52 Pelagic Fish Sttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1980".

Icelandic waters in May-June 1980".

#### Hydrography Cttee (ctd)

#### Reference papers

H:58 Jens Smed "Bottom temperature and salinity Pelagic Fish in the North Sea during the ICES Cttee Young Fish Survey January to March 1980". K-H Kock, "Some interactions between L:3 Biol.Oceanography F Nast and hydrography, krill and fish near M Stein Elephant Island in 1977/78". Cttee L:12 V V Tereshchenko "The effect of hydrometeorological factors on the transfer of eggs and Biol.Oceanography larvae of the northeastern Arctic Cttee cod into the Bear Island -Spitsbergen area". R H Douglass "Environmental issues arising from L:70

L:70 R H Douglass "Environmental issues arising from large-scale deployment of OTEC systems - an engineer's perspective".

### D - STATISTICS COMMITTEE

D:1		Administrative Report.
D:2	J-Y Le Gall, A Maucorps et C de Verdelhan	"Déscription du système statistique des pêches maritimes en France (1980)".
D:3		"Report of the Statistics Committee Liaison Working Group, Copenhagen, 19-20 May 1980".
D:4 Ref. Hydrography Cttee	D L Cram and M Mall	"Some experience with an experimental fisheries-oriented data-base".
D:5	K Hoydal	"Fishing operations across the eastern boundary of ICES Subdivision $V_{\mbox{\scriptsize bl}}$ ".
D:6 Ref. Demersal and Pelagic Fish Cttees and Shellfish Cttee	G Gaschütz, D Pauly and N David	"A versatile BASIC Program for fitting weight and seasonally oscillating length growth data".
D:7 Ref. Demersal and Pelagic Fish Cttees and Shellfish Cttee	D Pauly and N David	"A BASIC Program for the objective extraction of growth parameters from length-frequency data".
D:8 Ref. Hydrography Cttee	E Collins Ahdranov.	"Environmental impact/assessment studies - the problem of handling interdisciplinary data".
D:9 Ref. Demersal Fish Cttee	J G Shepherd and J G Pope	"A preliminary analysis of species directivity of effort in UK fisheries".
D:10 Ref. Hydrography Cttee	J A Pope	"Some statistical techniques for looking at large data sets".
D:11		"Report of the Working Group for the Eventual Establishment of an ICES ADP System for Fishery Statistics, Copenhagen, 21-23 May 1980".
D:12 Ref. Hydrography Cttee	P Geerders	"Introductory paper to the Joint Session of the Hydrography and Statistics Committees".
D:13 Ref. Hydrography Cttee	M T Jones	"The MIAS Oceanographic Data Base - the development of a general purpose data structure for serial data".
D:14 Ref. Hydrography Sttee	D P Kohnke	"Techniques for reducing large volumes of oceanographic data".

## Statistics Cttee (ctd)

D:15	ICES Statistician	"Progress Report".
D:16 Ref. Hydrography Cttee	E G Heyerdahl and R Payne	"A data management system for the northeast monitoring program, the requirements for a multi-discipline, multi-agency project".
D:17 Ref. Hydrography Cttee	Jens Smed	"Distribution of oceanographic information to the ICES community".
D:18 Ref. Mariculture Cttee	Chairman of Statistics Cttee	"Collection of statistics on aqua- culture".
D:19*	FAO/CWP Secretary	"Coordinating Working Party on Atlantic Fishery Statistics, 10th Session, Madrid, 22-29 July 1980".
D:20 Ref. Hydrography Cttee	0 Feddersen	"'Dana's' computer facilities. Dedicated system for on-board laboratory automation".

D:21

D:22

st For the relevant Committee only.

### E - MARINE ENVIRONMENTAL QUALITY COMMITTEE

E:1		Administrative Report.
E:2 withdrawn	H H White, Th. P O'Connor and P Kilho Park	"Biological effects of the marine dumping of industrial wastes at U.S. deep ocean dumpsites".
E:3 Ref. Hydrography Cttee		"Report of the Coordinating Group on Sediments and Pollution, Texel, Netherlands, 25-26 February 1980".
E:4		"Report of the Sixth Meeting of the Working Group on Marine Pollution Baseline and Monitoring Studies in the North Atlantic, 18-20 February 1980, Copenhagen".
¥ E:5		"Report of the ICES/SCOR Working Group on the Study of Pollution of the Baltic, Copenhagen, 20-22 February 1980".
E:6		"Report of the First Joint Session between the Working Group on Marine Pollution Baseline and Monitoring Studies in the North Atlantic and the ICES/SCOR Working Group on the Study of Pollution in the Baltic, 20 February 1980, Copenhagen".
E:7	G Kullenberg	"Observer's report on the Xth Session of the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP)".
E:8	J F Uthe and C J Musial	"Report of the Fifth ICES Intercalibration Study of PCBs in Biological Material".
E:9	J F Uthe, C L Chow and D P Scott	"Report on the use of statistics in the study of pollution levels and trends in pollution levels in marine biota".
E:10	G R Sirota and J F Uthe	"Studies on polycyclic aromatic hydrocarbons in Western Atlantic shellfish".
E:11	C J Musial and J F Uthe	"Studies on phthalate esters in Western Atlantic finfish".
E:12	R Schneider	"Significance of equilibrium partitioning and lipid composition in PCB accumulation by fish".
E:13	S J de Groot	"Preliminary bibliography of literature dealing with the effects of marine sand and gravel extraction on fisheries".

E:14	L G M Th. Tuinstra A H Roos and W A Traag	, "Calculation of the PCB content in fish samples".
E:15	A J Murray and R J Law	"Results of a mussel watch programme in England and Wales in 1977 and 1978".
E:16	R J Law and J E Portmann	"Summary of results of the first ICES intercomparison exercise on petroleum hydrocarbons".
E:17		"Papers of interest to the Marine Environmental Quality Committee".
E:18 Ref. Hydrography Cttee	K Grasshoff and H P Hansen	"Small-scale variability of chemical parameters in the Baltic".
E:19 Ref. Hydrography Cttee	J M Bewers <u>et al.</u>	"Design and logistical options for the conduct of the ICES Fifth Round Intercalibration for Trace Metals in Seawater".
E:20	S Ray and D W McLeese	"Bioavailability of chlorinated hydro- carbons and heavy metals in sediments to marine invertebrates".
E:21	V Zitko	"PCBs and other organochlorine compounds in sharks and tunas".
E:22	C R Allchin	"The determination of ploychlorinated biphenyl (PCB) residues in environmental samples using glass capillary gas chromatography (GC) ² ".
E:23	N P Morozov and A M Stepanov	"Complex approach to the study of sea coastal ecosystems in connection with their pollution".
E:24	R F Vaccaro, J M Capuzzo and N H Marcus	"The oceans and U.S. sewage sludge disposal strategy".
E:25	B Watermann and V Dethlefsen	"Preliminary report on histology and incidence of pseudobranch tumors in Atlantic cod (Gadus morhua) in the German Bight".
E:26	R J Law	"Hydrocarbon concentrations in water and sediments from the Irish Sea, Liverpool Bay and the English Channel".
E:27	R A A Blackmann and R J Law	"The hydrocarbon content of 'water-soluble' fractions of crude oil".
E:28	M G Norton	"Monitoring of areas receiving dumped wastes around England and Wales".

E:29	D A Lawson and D S Kirkwood	"An automated method for the deter- mination of total mercury in environmental samples".
E:30	P Vuorinen and M-B Axell	"Effects of water soluble fractions of crude oil on herring eggs and pike fry".
E:31		"Introduction to biological effects of oil pollution in the marine environment. A Bibliography".
E:32 Ref. Marine Mammals Cttee	P Johansen, F O Kapel and I Kraul	"Heavy metals and organochlorines in marine mammals from Greenland".
E:33 Ref. Mariculture Cttee		"Report of the ICES Working Group 'Pathology and Diseases in Marine Organisms', Copenhagen, 6-9 May 1980".
		"Rapport du Groupe de Travail du CIEM 'Pathologie et Maladies des Organismes marins', Copenhague, 6-9 mai 1980".
E:34 Ref. Hydrography Cttee	J C Duinker	"Processes affecting the behaviour of contaminants (metals and organochlorines) during estuarine mixing and in coastal areas, with particular reference to the southern North Sea".
E:35	J C Duinker, M T J Hillebrand, K H Palmork and S Wilhelmsen	"A discussion on the value of the estimation of polychlorinated biphenyls (PCBs) in environmental samples from packed column gas-liquid chromatographic data".
E:36	R Kaas	"L'échouement de l'Amoco Cadiz; conséquences sur les peuplements algaux des côtes bretonnes".
E:37	G Decadt, M Bogaert, L Goeyens and W Baeyens	"Determinations of mercury in various compartments of a coastal marine ecosystem".
E:38	G Gillain, C Duyckaerts and A Distèche	"Trace metals (Zn, Cd, Pb, Cu, Sb and Bi) levels (ionic forms and dissolved organic complexes) in the Southern Bight (Belgian coast). Technique to avoid contamination during sampling and filtration and to improve representativity".
E:39	F Noël-Lambot, J M Bouquegneau and A Distèche	"Some mechanisms promoting or limiting bioaccumulation in marine organisms".
E:40	A V Holden	"Report on the Fourth ICES Organo-chlorine Intercalibration Exercise".

E:41 Ref. Marine Mammals Cttee	J McKie, I M Davies and G Topping	"Heavy metals in grey seals (Halichoerus grypus) from the east coast of Scotland".
E:42 Ref. Marine Mammals Cttee	C R Falconer, I M Davies and G Topping	"Selected trace metals in porpoises (Phocoena phocoena) from the northeast coast of Scotland".
E:43	I M Davies	"The role of suspended solids in the distribution and speciation of mercury in the Forth estuary".
E:44	G Topping	"A summary report on the 6th ICES Trace Metal Intercomparison Exercise for Cadmium and Lead in Biological Tissue".
E:45	A V Holden and G Topping	"The future of ICES analytical intercomparison exercises".
E:46	A D F Johnstone and A D Hawkins	"Changes in the respiration and blood circulation of cod, Gadus morhua, induced by exposure to pollutants".
E:47	A D McIntyre	"A note on the input of contaminamts from the atmosphere to the sea".
E:48	A P Ward, L C Massie and J M Davies	"A survey of the level of hydrocarbons in the water and sediments in areas of the North Sea".
E:49 Ref. Biol. Oceanography Cttee	J M Davies, I E Baird, L C Massie and A P Ward	"Chemical and productivity measurements in an enclosed water column".
E:50	R Johnston	"Environmental quality assessment in estuarine and coastal waters".
E:51 Ref. Mariculture Cttee	A L S Munro et al.	"The quarantine of coho salmon for a whole life cycle".
E:52 POSTER	H Möller, R Schneider and C Schnier	"PCBs and metals in mussels from the western Baltic".
E:53	M Munk Hansen	"A critical evaluation of the use of chemical analyses of organisms to monitor sea water chemistry".
E:54 Ref. Biol. Oceanography Cttee	R J R Grainger, C Duggan, D Minchin and D O'Sullivan	"Fisheries related investigations in Bantry Bay following the Betelgeuse disaster".
E:55 Ref. Marine Mammals Cttee	D E Sergeant	"Levels of mercury and organochlorine residues in tissues of sea mammals from the Gulf of St.Lawrence estuary".

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E:56	J B Pearce	"Status of estuaries and coastal waters between Cape Hatteras and Maine: a review".
E:57	J G Soszka <u>et</u> <u>al.</u>	"Trace metals, fluorine and radio- nuclids in Antarctic krill - Euphausia superba Dana".
E:58 Ref. Biol. Oceanography Cttee	J M Capuzzo	"The effects of pollutants on marine zooplankton at deepwater dumpsite 106; toxic effects and bio-accumulation of Dupont Edgemoor waste".
E:59	R H Plumb Jr. and J M Brannon	"An evaluation of short-term sediment extracts to predict water column effects of dredged material disposal".
E:60 Ref. Mariculture, Shellfish and Anacat Cttees		"Report of the ICES Working Group on the Introduction of Non-Indigenous Marine Organisms" - with a Supplement.
E:61	V Tervo et al.	"Contents of metals and chlorinated hydrocarbons in fish and benthic invertebrates in the Gulf of Bothnia and in the Gulf of Finland in 1979".
E:62		Withdrawn.
E:63	A Jensen	"Preliminary report of the estimation of the accumulation rate of heavy metals in sediments from four Danish marine areas".
E:64	A Jensen	"A discussion paper about the future role of sediment studies within ICES".
E:65	T Melvasalo and P Tulkki	"Effects of pollution of the seas around Finland".
E:66 Ref. Marine Mammals Cttee	R Wagemann, N B Snow, A Lutz and Withdow J B Kemper	"Heavy metals in the narwhale Monodon monoceros from the Canadian Arctic".
E:67	J R Schubel and H J Bokuniewicz	"Combining submarine sand mining with contaminated dredged material disposal - a possible solution to two problems".

## <u>Marine Environmental Quality Cttee</u> (ctd) Reference papers

### Reference Papers to the Marine Environmental Quality Committee

C:1 Hydrography Cttee		"Second Report of the Marine Chemistry Working Group, Copenhagen, 12-14 February 1980".
C:11 Hydrography Cttee		"On the mixing conditions in the Baltic Transition Area".
C:36 Hydrography Cttee	S H Fonselius	"On long time variations of phosphorus in Baltic surface water".
F:22 Mariculture Cttee	K E Jørstad, F Solberg and S Tilseth	"Enzyme polymorphism expressed in newly hatched cod larvae and genetic analysis of larvae exposed to hydrocarbons".
F:25 Mariculture Cttee	H Grave	"Fluor content of salmonids fed on Antarctic krill, <u>Euphausia</u> <u>superba</u> "
L:15 Biol.Oceanography Cttee	A W White	"Fate and consequences of dino- flagellate toxins in marine food chains".

### F - MARICULTURE COMMITTEE

F:1		Administrative Report.
F:2		"List of publications in the field of mariculture, 1979".
F:3	H Kuhlmann and H Koops	"A new technology for rearing elvers"
F:4	H Koops and H Kuhlmann	"Annual variation of feeding and growth rate of eels farmed in thermal effluents of a conventional power station".
F:5	H Wienbeck	"On the oxygen balance of an experimental eel farm operated in thermal effluents of a conventional power station".
F:6	A Arias, R B Rodriguez and P Drake	"Fish production in extensive polyculture in the esteros of Cadiz (Southern Spain)".
F:7 Ref. Shellfish Cttee	P J Dare	"The susceptibility of seed oysters of Ostrea edulis L. and Crassostrea gigas Thunberg to natural infestation by the copepod Mytilicola intestinalis (Steuer)".
F:8 Ref. Anacat. Cttee	B D Glebe, W Eddy and R L Saunders	"The influence of parental age at maturity and rearing practice on precocious maturation of hatchery-reared Atlantic salmon parr".
F:9	V Øiestad and A S Haugen	"Rearing of halibut larvae ( <u>Hippoglossus</u> hippoglossus L.) to metamorphosis and beyond".
F:10 Ref. Demersal Fish Cttee	R Harrop and J H Nichols	"Ling incubation experiment, 1979".
F:11 Withdrawn	M H Barahona- Fernandes and M T Dinis	"Rearing and growing of Dover sole (Solea solea) in laboratory conditions".
F:12	Th. Neudecker	"The performance of the condition index of oysters C Crassostrea gigas) during spring 1980 at two selected sites of the German coast".
F:13		Withdrawn.
F:14		Withdrawn.
F:15	M F Li, G S Traxler, S Clyburne and J E Stewart	"Malpeque disease: isolation and morphology of a Labyrinthomyxa-like organism from diseased oysters".

# Mariculture Cttee (ctd)

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F:16	G J Anderson and K K Chew	"Intertidal culture of the Manila clam, <u>Tapes japonica</u> , using hatchery-reared seed clams and protective net enclosures".
F:17	M Abraham, V Hilge, S Lison and H Tibika	"A functional analysis of the relation ship between envelope cells and oocytes in the teleostean ovary".
F:18 Ref. Anacat. Cttee	B Eckstein, V Hilge and S Cohen	"Formation of $5\beta$ - androstanes as the major metabolites of testicular tissue of human chorionic gonadotropin treated <u>Anguilla anguilla</u> (L.) at the silver stage".
F:19 POSTER	C R Arnold	"Spawning and rearing of red drum (Scianenops oscellata) and red snapper (Lutjanus campechanus) in captivity".
F:20	B Braaten and S Lohne Gokstad	"Appetite feeding experiments with cod - preliminary results".
F:21		"Report of Study Group on Genetics".
F:22 Ref. MEQC and Demersal Fish Cttee	_	"Enzyme polymorphism expressed in newly hatched cod larvae and genetic analysis of larvae exposed to hydrocarbons".
F:23	I Huse and P Jensen	"Status of an intensive cod-rearing project in Norway".
F:24		Withdrawn.
F:25 Ref. MEQC	Withdrawn	"Fluor content of salmonids fed on Antarctic krill, <u>Euphausia</u> superba".
F:26 Ref. Anacat. Cttee	K Tiews	"Report on the EIFAC Symposium on New Developments in the Utilisation of Heated Effluents and of Re- circulation Systems for Intensive Aquaculture, supported by ICES".
F:27	E His et R Robert	"Action d'un sel organométallique, l'acétate de tributyle-étain sur les oeufs et les larves D de <u>Crassostrea gigas</u> (Thunberg)".
F:28	S Hansson	"An evaluation of different methods for the determination of fish food composition".
F:29	J Person-Le Ruyet J Barret, D L'Elchat et	"Données sur la croissance du turbot d'élévage, <u>Scophthalmus</u> <u>maximus</u> , entre 3 mois et 3 ans".

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## Mariculture Cttee (ctd)

F:30	D E Aiken and L S Waddy	"Brood stock control in a lobster culture system".
F:31	D Kuhlmann, G Quantz, W Nellen and J Lenz	"The development of turbot eggs, Scophthalmus maximus L., from the Baltic Sea under different temperature and salinity conditions".
F:32	G Quantz, D Kuhlmann, U Witt, W Nellen and J Lenz	"Rearing of turbot larvae (Scophthalmus maximus L.) on cultured food organisms: results from the 1979 and 1980 rearing seasons".
F:33	Ed. by J D Castell and K Tiews	"Report of the EIFAC, UINS and ICES Working Group on Standardisation of Methodology in Fish Nutrition Research (Hamburg, Federal Republic of Germany, 21-23 March 1979)".
		"Rapport du Groupe de Travail de la CECPI, de l'UISN et du CIEM sur la Normalisation de la Méthodologie dans la Recherche sur la Nutrition des Poissons (Hambourg, République Fédérale d'Allemagne, 21-23 mars 1979)".
F:34	C E Nash	"Fundamental limitations to the scaling up of aquaculture facilities".
F:35		

### Reference Papers to the Mariculture Committee

D:18 Statistics Cttee	Chairman of Statistics Cttee	"Collection of statistics on aqua- culture".
E:33 MEQC		"Rapport du Groupe de Travail du CIEM: 'Pathologie et maladies des organismes marins', Copenhague, 6-9 mai 1980".
		"Report of the ICES Working Group: 'Pathology and Diseases in Marine Organisms', 6-9 May 1980, Copenhagen".
E:51 MEQC	A L S Munro <u>et</u> <u>al.</u>	"The quarantine of coho salmon for a whole life cycle".
E:60 MEQC		"Report of the Working Group on the Introduction of Non-indigenous marine Organisms" - with a Supplement".
K:9 Shellfish Cttee	R Wienberg	"On the food and feeding habits of Pandalus borealis (Krøyer 1838)".

#### G - DEMERSAL FISH COMMITTEE

G:1		Administrative Report.
G:2 Ref. Pelagic Fish Cttee		"Report of the <u>ad hoc</u> Working Group on Multispecies Assessment Model Testing, Copenhagen, 3-7 March 1980".
G:3 Ref. Pelagic Fish Cttee		"Report of the Working Group on Division IIIa Stocks, Charlottenlund, 24-28 March 1980".
G : 4		"Report of the Working Group on Redfish and Greenland Halibut in Region 1, Copenhagen, 18-25 March 1980".
G:5	N Daan, J R G Hislop, J Lahn-Johannessen, W G Parnell, J S Scott and P Sparre	"Results of the International O-Group Gadoid Survey in the North Sea 1980".
G:6		"Report of the Working Group on Fish Stocks at the Faroes, Copenhagen, 31 March - 2 April 1980".
G:7		"Report of the North Sea Flatfish Working Group, Copenhagen, 17-22 March 1980".
G:8		"Report of the North Sea Roundfish Working Group, Copenhagen, 14-18 April 1980".
G:9		"Report of the Irish Sea and Bristol Channel Working Group, Copenhagen, 17-25 April 1980".
G:10		"Selected demersal fish publications for 1979".
G:11		"Report of the Saithe (Coalfish) Working Group, Copenhagen, 28 April - 2 May 1980".
G:12		"Report of the Arctic Fisheries Working Group, Copenhagen, 5-10 May 1980".
G:13		"Report of the Working Group on Assessment of Hake Stocks, Copenhagen, 12-17 May 1980".
G:14	P D Wallace and A M Watson	"The migration pattern of sole tagged in the Thames estuary in the summer of 1976 and 1977".
G:15	E Fridgeirsson	"On sandeel in O-group surveys in Icelandic and adjacent waters 1970-79".

G:16		Withdrawn.
G:17		Withdrawn.
G:18 Ref. Biol. Oceanography Cttee	L Sullivan	"Distribution, abundance, and mortality estimates of larval butter-fish, Peprilus triacanthus, from MARMAP surveys, 1977 and 1978".
G:19 Ref. Pelagic Fish Cttee	J G Pope	"Phalanx analysis: an extension of Jones' length cohort analysis to multispecies cohort analysis".
G:20		Withdrawn.
G:21 Ref. Hydrography Cttee	A A Glukhov et al.	"Some results of the Soviet investigations of deep-water fish supply in the Faroe economic zone in 1979".
G:22	V V Dushchenko	"Preliminary results of investigations on intraspecific groupings of roundnose grenadier in the North Atlantic".
G:23 Ref. Pelagic Fish Cttee	L D Panasenko and M S Soboleva	"Food interrelations between the Barents Sea capelin and Polar cod".
G:24	A B Karasev	"On infestation of cod ( <u>Gadus</u> <u>morhua morhua</u> L.) with nematodes of Anisakidae (Skrjabin et Karokhin, 1945) in the Barents Sea".
G:25	V P Ponomarenko et al.	"Growth and maturation of the Lofoten-Barents Sea cod".
G:26	P H Odense	"Technological studies of the cod- worm ( <u>Phoconema</u> <u>decipiens</u> ) problem".
G:27 Ref. Pelagic Fish Cttee	K Hoydal	"Large scale changes in fisheries and their effect on stock assess-ments".
G:28 Ref. Fish Capture and Pelagic Fish Cttees	K Hoydal, J Rørvik and P Sparre	"A method for estimating the effective mesh sizes and the effects of changes in gear parameters".
G:29 Ref. Pelagic Fish Cttee		"Report of the International O-Group Survey in Faroese Waters 1980".
G:30	V Nikolaev	"Cod stocks in 1979 - Introduction to Annales Biologiques, Vol.36 (for 1979)".
G:31		"Publications relevant to the interests of the Demersal Fish Committee, 1980".

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G:32	F J Pereiro, A Fernández and S Iglesias	"Relationships between depth and age, and recruitment indexes of hake on Galicia and Portugal shelf".
G:33	B W Jones	"Growth changes in North-East Atlantic saithe stocks and the implications for stock assessment".
G:34	E Nielsen	"A simulation method for calculation of a TAC of North Sea sole".
G:35	G W Smith, A D Hawkins and C Robb	"The growth of juvenile cod <u>Gadus</u> <u>morhua</u> in a Scottish sea loch".
G:36	N M Soofiani and A D Hawkins	"Energy costs at different levels of feeding in juvenile cod".
G:37 Ref. Shellfish Cttee	F G Howard	"Some observations on the food of cod (Gadus morhua L.) on the Fladen and in the Farn Deeps".
G:38	R M Cook	"Estimating haddock population size by age using Scottish research vessel surveys and virtual population analysis".
G:39 Ref. Pelagic and Baltic Fish Cttees	H Lassen	"On the quality of the TACs recommended through ICES".
G:40 Ref. Pelagic and Baltic Fish Cttees	P Sparre	"A goal function of fisheries (legion analysis)".
G:41		Withdrawn.
G:42	S A Schopka	"The recent changes in fishing pattern in Icelandic waters and their effects on the yield of cod and haddock stocks".
G:43 Ref. Shellfish Cttee	R De Clerck and G Sterk	"Observations on the predation of cod and whiting on Nephrops norvegicus (L.) in the Outer Silver Pit during 1979".
G:44	F A van Beek and P I van Leeuwen	"Indices of recruitment from prerecruit surveys on North Sea sole".
G:45	A Sigurdsson and J V Magnússon	"On the nursery grounds of the Greenland halibut spawning in Icelandic waters".
G:46	J Magnússon	"On the relation between depth and redfish in spawning condition SW of Iceland".
G:47	G Gubsch	"Studies on age determination and growth of the ice fish Chaenocephalus aceratus Lönnberg".

G:48	A W May, R G Halliday, R Wells and E Dunne	"Management of Canadian cod stocks".
G:49	Sv.Aa.Horsted, J M Jensen, B W Jones, J Messtorff and A Schumacher	"An assessment of the cod stock at East Greenland".
G:50	J P Hillis	"Ageing of cod <u>Gadus</u> <u>morhua</u> from whole otoliths".
G:51	N Daan	"Report on the catches of cod, haddock, whiting and Norway pout during the International Young Herring Survey 1980".
G:52	General Secretary	"Proposal for a Joint NAFO/ICES Working Group on Redfish Research".
G:53		"Preliminary report of the Inter- national O-Group Fish Survey in the Barents Sea and Adjacent Waters in August-September 1980".

### Reference Papers to the Demersal Fish Committee

B:17 Fish Capture Cttee	E J Simmonds and S T Forbes	"Some range dependent variations affecting acoustic fish stock estimations".
B:18 Fish Capture Cttee	J I Edwards	"A barge for the transport and storage of live fish".
B:19 Fish Capture Cttee	J I Edwards	"A preliminary investigation of the target strength of herring".
B:20 Fish Capture Cttee	S T Forbes, E J Simmonds and J I Edwards	"Progress in target strength measure- ments on live gadoids".

### Reference Papers

Hererence rapers		
B:26 Fish Capture Cttee	M Holm and A K Beltestad	"Behaviour of saithe penned in different densities".
B:27 Fish Capture Cttee	G Rauck	"Mesh selectivity studies on board a low powered German sole beam trawler".
D:6 Statistics Cttee	G Gaschütz, D Pauly and N David	"A versatile BASIC Program for fitting weight and seasonally oscillating length growth data".
D:7 Statistics Cttee	D Pauly and N David	"A BASIC Program for the objective extraction of growth parameters from length-frequency data".
D:9 Statistics Cttee	J G Shepherd and J G Pope	"A preliminary analysis of species directivity of effort in UK fisheries".
F:10 Mariculture Cttee	R Harrop and J H Nichols	"Ling incubation experiment, 1979".
F:22 Mariculture Cttee	K Jørstad, F Solberg and S Tilseth	"Enzyme polymorphism expressed in newly hatched cod larvae and genetic analysis of larvae exposed to hydrocarbons".
H:10 Pelagic Fish Cttee	M R Clark	"Preliminary results of a study on the food and feeding relationships of fish species from the Campbell plateau, New Zealand".
H:52 Pelagic Fish Cttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1980".
H:64 Pelagic Fish Cttee	H Vilhjálmsson, J Magnússon and E Fridgeirsson	"Report on the O-group fish survey in Icelandic and East Greenland waters, August 1980".
J:5 Baltic Fish Cttee	M N Lishev and D V Uzars	"Daily ration and food consumption in cod from eastern Baltic".
J:12 Baltic Fish Cttee	O Bagge and E Steffensen	"Growth pattern in cod otoliths as indicator for mixing of stocks".
K:20 Shellfish Cttee	G Conan and V Cheynier	"Preliminary data on the by-catch of fishes in the French fishery for Nephrops norvegicus in the Celtic Sea". $(E+F)$
K:35 Shellfish Cttee	J Ariz and M A R Fernández	"Selection on octopus ( <u>Octopus</u> vulgaris) and sea breams of the Spanish cephalopods bottom trawl off North West Africa".

North West Africa".

# Reference Papers

L:3 Biol.Oceanography Cttee	K H Koch, F Nast and M Stein	"Some interactions between hydrography, krill and fish near Elephant Island in 1977/78".
L:26 Biol.Oceanography Cttee	R Jones and E W Henderson	"Further observations on energy flow through the marine food chain".
L:32 Biol.Oceanography Cttee	H Möller	"Scyphomedusae as predators and food competitors of larval fish".
L:35 Biol.Oceanography Cttee	C Chevalier	"Contribution à l'étude de la croissance des juveniles de <u>Dicentrarchus labrax</u> L. en Bretagne nord".
L:59 Biol.Oceanography Cttee	E Durbin and A Durbin	"Some factors affecting gastric evacuation in fishes".
L:60 Biol.Oceanography Cttee	E Durbin, A Durbin, R Langton, R E Bowman and M Grosslein	"Analysis of stomach contents of Atlantic cod (Gadus morhua) and silver hake (Merluccius bilinearis) for the estimation of daily rations". (REVISED)
L:61 Biol.Oceanography Cttee	R Langton, B M North, B P Hayden and R E Bowman	"Fish food-habit studies - sampling procedures and data processing methods utilised by the Northeast Fisheries Center, Woods Hole Laboratory, USA".
L:62 Biol.Oceanography Ctte <b>e</b>	W Hahm and R Langton	"Prey selection based on predator/ prey weight ratios for some Northwest Atlantic fish".
L:63 Biol.Oceanography Cttee	M Pennington, R E Bowman and R Langton	"Variability of the weight of fish stomach contents and its implications for fish food-habit studies".

### H - PELAGIC FISH COMMITTEE

H:1		Administrative Report.
H:2		"Bibliography of papers published by members of the Pelagic Fish Committee in 1979 or relevant to the interest of that Committee".
н:3		"Final report on the ICES-Coordinated Acoustic Survey of Herring Stocks in 1979".
Н:4		"Report of the Herring Assessment Working Group for the Area South of 62°N, Copenhagen, 21-26 April 1980".
Н:5		"Report of the Blue Whiting Assessment Working Group, Bergen, 5-10 May 1980".
н:6	P 0 Johnson (ICES Coordinator)	"Report on echo-integrator surveys for sprat undertaken in the North Sea during the 1979-80 winter season".
H:7		"Report of the Mackerel Working Group, Copenhague, 28 April - 3 May 1980".
H:8		"Report of the Working Group on Atlanto-Scandian Herring, Bergen, 12-14 May 1980".
н:9	R Schöne	"Biological investigations on blue whiting in the waters between Faroe and the area southwest of Ireland in January to March 1980".
H:10 Ref. Demersal Fish Cttee	M R Clark	"Preliminary results of a study on the food and feeding relationships of fish species from the Campbell plateau, New Zealand".
H:11	H Dornheim and G Joakimsson	"Some observations on the western mackerel stock in March/April 1980".
H:12	F G Carey and B Robison	"Patterns in the activities of sword-fish, Xiphias gladius".
H:13	A B Bowers	"Characteristics of herring spawning grounds".
H:14	N A Nazarov	"On the problem of rational fishing for the Northeast Atlantic horse-mackerel".
H:15	E M Karasiova and V N Feldman	"Distribution and abundance of the North Sea sprat eggs and larvae in 1972".
н:16	G P Mazhirina	"State of the reproductive system of blue whiting from the northeast Atlantic in the spring/summer period of 1979".

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Pelagic Fish Cttee		
н:17	N A Isaev and A V Shevchenko	"Peculiarities of blue whiting distribution in the Norwegian Sea in May/June 1978 and 1979".
H:18	M L Zaferman et al.	"Assessment of blue whiting stocks and prospects of their fishery in the Norwegian Sea".
н:19	N G Ushakov and A S Galkin	"Perspectives for capelin fishery and their stock status in the Barents Sea".
H:20	A V Zubchenko et al.	"On migration of larval Anisakis sp. into the flesh of blue whiting (Micromesistius poutassou)".
H:21	T V Antipova et al.	"Seasonal and year to year dynamics of occurrence frequency of the main food objects for haddock and their stomach fullness degree in the Barents Sea".
H:22 Ref. Baltic Fish Cttee	E Ojaveer and L Rannak	"Dynamics of some parameters of herring populations in the northeastern Baltic in 1948-79".
н:23	Ed. by: E Bakken, J Rodriguez-Roda and K Tiews	"Report of the Bluefin Tuna Working Group. Observations on the size composition of bluefin tuna catches from 1979".
Н:24		"Report on the ICES Coordinated Acoustic Survey of Herring in the Northwestern North Sea, 1980".
Н:25	P H Odense and C Annand	"Herring ( <u>Clupea harengus</u> ) isoenzyme studies".
н:26	V Nikolaev	"Herring Stocks in 1979 - Introduction to Annales Biologiques, Vol.36 (for 1979)".
Н:27		Withdrawn.
H:28	J G Shepherd	"Management of the North Sea stock of herring".
Н:29	S J Lockwood and J G Shepherd	"An alternative pattern of exploitation for the western mackerel stock".
H:30	D R Eaton	"Mortality of internally-tagged mackerel (Scomber scombrus L.)".
H:31	D R Eaton	"Mortality of mackerel confined in nets".

V K Zilanov

H:32

"Short results of the Soviet study of blue whiting (Micromesistius poutassou Risso) ecology in the North Atlantic".

## Pelagic Fish Cttee (ctd)

H:33 Ref. Biol. Oceanography Cttee	A Johannessen	"Predation on herring ( <u>Clupea harengus</u> ) eggs and young larvae".
Н:34	J Jakobsson	"Monitoring the recovery of the Icelandic summer spawning herring".
Н:35	A Corten	"Report of the ICES Young Fish Survey 1980: herring data".
н:36	A Corten	"Experiments on the detection of magnetic wire tags in herring catches at sea".
H:37	A Corten	"The use of larval abundance data for estimating the stock size of North Sea herring (II)".
H:38	I M Jorge and C Monteiro	"Preliminary results on age and growth of <u>Sardina pilchardus</u> Walb. in Sub-area IXa".
Н:39	V K Zilanov	"The results of Soviet research of blue whiting (Micromesistius poutassou) of the Barents Sea based on materials of 1947-79".
H:40	D Guerault	"La croissance linéaire de la sardine du Golfe de Gascogne - ses variations à long terme".
H:41	A Aglen and S A Iversen	"Distribution and abundance of sprat in the North Sea in winter 1979/80 determined by acoustic methods".
H:42	K Warburton and J R Hutcheon	"The abundance, density distribution and population structure of blue whiting to the west of Britain during April 1980".
H:43 Ref. Shellfish Cttee	R E Ulanowicz, M L Ali and W A Richkus	"Assessing harvests of pelagic and invertebrate fisheries of Northern Chesapeake Bay in terms of environmental variations".
H:44	J I Edwards and J P F Wilson	"Echo-integrator surveys for sprats in U.K. coastal waters from the Firth of Forth to the Moray Firth, January and March 1980".
Н:45	D W McKay	"Report on the International Survey of Herring Larvae in the North Sea and Adjacent Waters in 1979/80".
H:46	R S Bailey and I Edwards	"An evaluation of Scottish acoustic surveys as a means of estimating stock sizes".
H:47	M F Borges, S A Iversen and O Dahl	"On fecundity of North Sea mackerel (Scomber scombrus)".

Pelagic Fish Cttee	(ctd)	
н:48	J Molloy	"The results of Young Herring Surveys in the Irish Sea, 1979 and 1980".
H:49	R J R Grainger	"The distribution and abundance of herring larvae to the south of Ireland in 1979/80".
Н:50	J E Carscadden and D S Miller	"Estimates of tilt angle of capelin using underwater photographs".
Н:51	D S Miller	"Hydroacoustic assessment of pelagic fish stocks in the Newfoundland and Labrador areas".
H:52 Ref. Hydrography, Demersal Fish and Biol.Oceanography Cttees		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1980".
<b>⊞</b> :53		"Rapport du Groupe de Travail pour l'Evaluation des Stocks de Sardines dans les Divisions VIIIc and IXa, Vigo, 30 juin - 4 juillet 1980".
Н:54		"Final report on the acoustic survey in Skagerrak-Kattegat 3-14 September 1979".
H:55	S Holzlöhner	"Diurnal food intake variations in <u>Sardina</u> <u>pilchardus</u> Walb.".
н:56	H Schultz, H Stein, Ch Nagel and N Verch	"Blue whiting investigations in the Norwegian Sea in spring 1979 and 1980".
H:57	H Schultz, N Verch and N Schultz	"Blue whiting survey in the Norwegian Sea in summer 1979".
H:58 Ref. Hydrography Cttee	Jens Smed	"Bottom temperature and salinity in the North Sea during the ICES Young Fish Survey January to March 1980".
Н:59	S A Berkeley and E D Houde	"Swordfish, Xiphias gladius, dynamics in the Straitsof Florida".
н:60	P 0 Hjertenes	"The spurdogs in the North Sea area; the Norwegian fishery and observations on changes in migration pattern".
H:61	T Monstad and L Midttun	"Norwegian blue whiting investigations in April/May 1980".
Н:62	I Røttingen	"Indication of high natural mortality for juvenile herring from acoustic and tagging data".

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# Pelagic Fish Cttee (ctd)

н:63	H Vilhjálmsson, P Reynisson, J Hamre and I Røttingen	"Acoustic abundance estimates of the Icelandic stock of capelin, October 1978 - January 1980".
H:64 Ref. Demersal Fish Cttee	H Vilhjálmsson, J Magnússon and E Fridgeirsson	"Report on the O-group fish survey in Icelandic and East Greenland waters, August 1980".
Н:65	R G Lough, M R Pennington, G R Bolz and A S Rosenberg	"A growth model for larval sea herring ( <u>Clupea harengus</u> L.) in the Georges Bank-Gulf of Maine area based on otolith growth increments".
Н:66	R L Ratke and J M Dean	"The morphology of the otoliths of billfish (Istiophoridae) and their application to fisheries biology".

### Reference Papers to the Pelagic Fish Committee

B:17 Fish Capture Cttee	E J Simmonds, and S T Forbes	"Some range dependent variations affecting acoustic fish stock estimations".
B:18 Fish Capture Cttee	J I Edwards	"A barge for the transport and storage of live fish".
B:19 Fish Capture Cttee	J I Edwards	"A preliminary investigation of the target strength of herring".
B:20 Fish Capture Cttee	S T Forbes, E J Simmonds and J I Edwards	"Progress in target strength measurements on live gadoids".
D:6 Statistics Cttee	G Gaschütz, D Pauly and N David	"A versatile BASIC Program for fitting weight and seasonally oscillating length growth data".
D:7 Statistics Cttee	D Pauly and N David	"A BASIC Program for the objective extraction of growth parameters from length-frequency data".
G:2 Demersal Fish Cttee		"Report of the <u>ad hoc</u> Working Group on Multispecies Assessment Model Testing, Copenhagen, 3-7 March 1980".
G:3 Demersal Fish Cttee		"Report of the Working Group on Division IIIa Stocks, Charlottenlund, 24-28 March 1980".

# Pelagic Fish Cttee (ctd)

# Reference Papers

G:19 Demersal Fish Cttee	J G Pope	"Phalanx analysis: an extension of Jones' length cohort analysis to multispecies cohort analysis".
G:23 Demersal Fish Cttee	L D Panasenko and M S Soboleva	"Food interrelations between the Barents Sea capelin and Polar cod".
G:27 Demersal Fish Cttee	K Hoydal	"Large scale changes in fisheries and their effect on stock assessments".
G:28 Demersal Fish Cttee	K Hoydal, J Rørvik and P Sparre	"A method for estimating the effective mesh sizes and the effects of changes in gear parameters".
G:29 Demersal Fish Cttee		"Report of the International O-Group Survey in Faroese waters 1980".
G:39 Demersal Fish Cttee	H Lassen	"On the quality of the TACs recommended through ICES".
G:40 Demersal Fish Cttee	P Sparre	"A goal function of fisheries (legion analysis)".
L:26 Biol.Oceanography Cttee	R Jones and E W Henderson	"Further observations on energy flow through the marine food chain".
L:32 Biol.Oceanography Cttee	H Möller	"Scyphomedusae as predators and food competitors of larval fish".
L:35 Biol.Oceanography Cttee	C Chevalier	"Contribution à l'étude de la croissance des juveniles de <u>Dicentrarchus</u> <u>labrax</u> L. en Bretagne nord".
L:69 Biol.Oceanography Cttee	R Lasker, J Peleaz and R M Laurs	"The use of satellite infrared imagery for describing ocean processes in relation to spawning of the northern anchovy (Engraulis mordax)".

# J - BALTIC FISH COMMITTEE

J:1		Administrative Report.
		<del>-</del>
J:2		"Publications of interest to the Baltic Fish Committee".
J:3		"Report of the Working Group on Assessment of Demersal Stocks in the Baltic, Copenhagen, 5-10 May 1980".
J:4		"Report of the Working Group on Assessment of Pelagic Stocks in the Baltic, Copenhagen, 5-13 May 1980".
J:5 Ref. Demersal Fish Cttee	M N Lishev and D V Uzars	"Daily ration and food consumption in cod from eastern Baltic".
J:6 Ref. Fish Capture Cttee	S E Shevtsov	"Selectivity of trawl cod-ends for flounder fishery in the Baltic Sea".
J:7	R Hudd	"Feeding of Baltic herring larvae in the Gulf of Finland".
J:8	V Sjöblom, E Aro and P Suuronen	"Migrations, mortality and growth of cod in the northern Baltic Sea".
J:9	R Parmanne and V Sjöblom	"Abundance, mortality and production of spring-spawning Baltic herring larvae in the seas around Finland in 1979".
J:10	R Parmanne and V Sjöblom	"Abundance of sprat eggs and larvae in the northern Baltic in 1979".
J:11	H Lassen and B Sjöstrand	"Estimation of mortality components for some Baltic herring stocks in 1979".
J:12 Ref. Demersal Fish Cttee	O Bagge and E Steffensen	"Growth pattern in cod otoliths as indicator for mixing of stocks".
J:13	O Bagge	"Danish discards of cod in the Baltic".
J:14	G Aneer and S Nellbring	"An investigation of Baltic herring (Clupea harengus membras L.) spawning grounds in the Askö-Landsort area, northern Baltic proper".
J:15	J Horbowy and M Kuptelm	"Use of a multispecies model to assess the state of Baltic stocks and fore-cast the catches".

### Baltic Fish Cttee (ctd)

J:16	U Falk, D Kästner, O Hagström, N Håkansson and A Lindquist	"Hydroacoustic observations in the Baltic proper in October 1979. Preliminary results".
J:17	A Lindquist	"The spawning stock of sprat in the Baltic".
J:18	O Rechlin	"Dependence of yield per recruit and spawning stock per recruit curves of Baltic Sea sprat stocks on age of recruitment and on variations in natural mortality".
J:19	M Berner and N Schulz	"An estimation of cod discards on the basis of youngfish investigations by a herring bottom trawl in the western and southern Baltic".
J:20	B Vaske and N Schulz	"Application of some statistical methods to results of groundfish surveys in the Mecklenburg Bay and in the Arkona Basin in November 1978 and 1979".

### Reference Papers to the Baltic Fish Committee

B:8 Fish Capture Cttee	H Bohl	"Selection of cod by bottom trawl cod-ends in the central Baltic (German experiments 1978)".
G:39 Demersal Fish Cttee	H Lassen	"On the quality of the TACs recommended through ICES".
G:40 Demersal Fish Cttee	P Sparre	"A goal function of fisheries (legion analysis)".
H:22 Pelagic Fish Cttee	E Ojaveer and L Rannak	"Dynamics of some parameters of herring populations in the northeastern Baltic in 1948-79".

### K - SHELLFISH COMMITTEE

K:l		Administrative Report (+ Addendum 1).
<b>K∶</b> 2		"Report of the <u>Nephrops</u> Working Group, Aberdeen, 15-18 January 1980".
K:3		"Bibliography of publications relative to the interests of the ICES Shellfish Committee 1979" (+ Addendum 1).
K:4	P Berthou, J-Y Le Gall, F Djabali et M Yahiaoui	"Biologie et pêche de la praire <u>Venus</u> <u>verrucosa</u> (mollusque Veneridae) en Manche occidentale (Bretagne et Normandie): l - croissance".
K:5	P Berthou, J-Y Le Gall, F Djabali et M Yahiaoui	"Biologie et pêche de la praire <u>Venus</u> <u>verrucosa</u> (mollusque lamellibranche Veneridae) en Manche occidentale (Bretagne et Normandie): 2 - Reproductio et fécondité".
K:6	P Berthou et J-Y Le Gall	"Biologie et pêche de la praire <u>Venus</u> <u>verrucosa</u> (mollusque lamellibranche Veneridae) en Manche occidentale (Bretagne et Normandie): analyse des puissances relatives, effort de pêche nominal et effectif de la flotille Granvillaise".
K:7	P Berthou et J-Y Le Gall	"Biologie et pêche de la praire <u>Venus</u> <u>verrucosa</u> en Manche occidentale (Bretagne et Normandie): 4 - dynamique des populations, évaluation et gestion rationnelle du stock".
K:8	P Berthou et J-Y Le Gall	"Biologie et pêche de la praire <u>Venus</u> <u>verrucosa</u> en Manche occidentale (Bretagne et Normandie): 5 - mesures possibles d'aménagement de la pêcherie de praires de Granville".
K:9 Ref. Mariculture Cttee	R Wienberg	"On the food and feeding habits of Pandalus borealis (Krøyer 1838)".
K:10	E Edwards and D B Bennett	"Survival of discarded Nephrops".
K:11	J M DesLous Paoli et M Heral	"Valeurs caloriques de la chair de l'huître <u>Crassostrea gigas</u> Thunberg: estimation directe et biochimique".
K:12	E Edwards	"Preliminary results of a tagging experiment of the spider crab (Maia squinado) in the English Channel".
K:13	A Franklin and G D Pickett	"Shell growth increments in scallops $(\underline{\text{Pecten maximus}})$ from the English Channel".

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K:14	D Key and P E Davidson	"Preliminary results of a study of the stocks of clams (Mercenaria mercenaria) in Southampton water, England".
K:15	I B Berenboim, A Yu.Lysy and L I Serebrov	"On distribution, stock state and regulation measures of shrimp (Pandalus borealis Krøyer) fishery in the Barents Sea".
K:16	F Sarda	"Age, croissance et fréquence de mue chez <u>Nephrops norvegicus</u> (L.) dans la Mer Méditerranée (NE de l'Espagne)".
K:17	J M Alonso- Allende	"Nephrops norvegicus distribution off the Galician coast (NW of Spain)".
K:18	G Garrod and D Harding	"Preliminary estimates of distribution, abundance and mortality of larvae and the size of the <u>Nephrops norvegicus</u> (L.) spawning stock from larval surveys made off the north-east coast of England in 1976".
K:19		Withdrawn.
K:20 Ref. Demersal Fish Cttee	G Conan and V Cheynier	"Preliminary data on the by-catch of fishes in the French fishery for Nephrops norvegicus in the Celtic Sea". (E+F)
K:21	J Martin	"Abondance des larves d'étrille ( <u>Macropipus puber</u> L.) d'araignée ( <u>Maia squinado</u> Herbst) et de torteau ( <u>Cancer pagurus</u> L.) sur la côte ouest du Cotentin (Manche) de 1977 à 1979".
K:22	A M Tavares and P Øynes	"Results of a stratified bottom trawl survey for shrimp ( <u>Pandalus borealis</u> ) in the Barents Sea and the Spitsbergen area in May/June 1980".
K:23 Ref. Fish Capture Cttee	R P Briggs and P S Watson	"A comparison of catch composition with different net mesh sizes using a parallel haul technique in the Northern Ireland Nephrops fishery".
K:24	F M Serchuk and R J Smolowitz	"Size selection of sea scallops by an offshore scallop survey dredge".
K:25	C J Chapman and K A Ballantyne	"Some observations on the fecundity of Norway lobsters in Scottish waters".
K:26	J W Ropes and S A Murawski	"Size and age at sexual maturity of ocean quahogs (Arctica islandica) from a deep ocean site".

# Shellfish Cttee (ctd)

K:27	J Mason, A M Shanks and D I Fraser	"An assessment of scallop ( <u>Pecten maximus</u> L.) stocks off southwest Scotland".
K:28	J A Pope and J Mason	"The fitting of growth curves for $\underline{\underline{\text{Pecten}}}$ $\underline{\underline{\text{maximus}}}$ L.".
K:29	R G J Shelton and J A M Kinnear	"Recruitment trends in the lobster fishery off Berwickshire (SE Scotland) from 1955 to 1979".
K:30	J P Berthome et N Fernandez Castro	"Etude de la croissance et de la qualité de trois lots d'huître creuse <u>Crassostrea gigas</u> dans le bassin de <u>Marennes-Oléron en 1979".</u>
K:31	A G Martin, H Grizel et A Langlade	"Evaluation du recrutement d'huîtres plates ( <u>Ostrea edulis</u> ) collectées sur tuiles dans le quartier d'Auray (Bretagne) en 1979".
K:32 Ref. Biol. Oceanography Cttee	F Redant	"Population dynamics of brown shrimp (Crangon crangon) in the Belgian coastal waters. 1. Consumption-production model".
K:33 Ref. Biol. Oceanography Cttee	F Redant	"Population dynamics of brown shrimp (Crangon crangon) in the Belgian coastal waters. 2. Predation mortality".
K:34	D Vervoort, F Redant et D Declerck	"Causes and incidence of the 'black spot disease' on brown shrimp (Crangon crangon)".
K:35 Ref. Demersal Fish Cttee	J Ariz and M A R Fernandez	"Selection on octopus (Octopus vulgaris) and sea breams of the Spanish cephalopods bottom trawl off North West Africa".
к:36	Y Morizur, G Conan, A Guénole et M H Omnès	"Fécondité de <u>Nephrops</u> <u>norvegicus</u> dans le golfe de Gascogne".
K:37	G Conan	"Preliminary estimates of mortality parameters for Norway lobster in Bay of Biscay and in the Celtic Sea".
K:38	S A Murawski, J W Ropes and F M Serchuk	"Growth studies of the ocean quahog, Arctica islandica".

# Shellfish Cttee (ctd)

## Reference Papers

### Reference Papers to the Shellfish Committee

B:4 Fish Capture Cttee	G Thorsteinsson	"On the influence of mesh size and hanging ratio on the escape of <u>Pandalus</u> borealis through the side panels of a 4-seam bottom trawl".
B:7 Fish Capture Cttee	V A Sakhno and M K Sadokhin	"Investigation on bottom trawl selectivity in relation to the Barents Sea shrimp (Pandalus borealis)".
B:22 Fish Capture Cttee	A Merrien	"Utilisation de la télévision sous-marine pour l'inventaire et l'estimation directe des ressources en coquilles Saint-Jacques. Ex.: la Baie de Saint-Brieuc".
D:6 Statistics Cttee	G Gaschütz, D Pauly and N David	"A versatile BASIC Program for fitting weight, and seasonally oscillating length growth data".
D:7 Statistics Cttee	D Pauly and N David	"A BASIC Program for the objective extraction of growth parameters from length-frequency data".
E:60 MEQC		"Report of the ICES Working Group on the Introduction of Non-Indigenous Marine Organisms" (with a Supplement).
F:7 Mariculture Cttee	P J Dare	"The susceptibility of seed oysters of Ostrea edulis L. and Crassostrea gigas Thunberg to natural infestation by the copepod Mytilicola intestinalis (Steuer)".
G:37 Demersal Fish Cttee	F G Howard	"Some observations on the food of cod Gadus morhua (L.) on the Fladen and in the Farn Deeps".
G:43 Demersal Fish Cttee	R De Clerck and G Sterk	"Observations on the predation of cod and whiting on Nephrops norvegicus (L.) in the Outer Silver Pit during 1979".
H:43 Pelagic Fish Cttee	R E Ulanowicz, M L Ali and W A Richkus	"Assessing harvests of pelagic and invertebrate fisheries of Northern Chesapeake Bay in terms of environmental variations".
L:6 Biol.Oceanography Cttee	A Szaniawska	"Elements of ecological energetics of Crangon crangon (L., 1758) (Crustacea, Decapoda) in Gdańsk Bay".
L:14 Biol.Oceanography Cttee	J H Nichols, D B Bennett and A Lawrence	"A study of some problems related to quantitative sampling of lobster larvae (Homarus gammarus L.)".

#### Shellfish Cttee (ctd)

### Reference Papers

L:44 M Heral,
Biol. Oceanography D Razet,
Cttee S Maestrini
et J Garnier

"Composition de la matière organique particulaire dans les eaux du bassin de Marennes-Oléron. Apport énergetique pour la nutrition de l'huître".

L:58
Biol.Oceanography
Cttee - POSTER

S D Sulkin, W van Heukelem and P Kelly "Near-shore larval assemblages as a source of recruitment for estuarine and deep-sea invertebrates".

# L - BIOLOGICAL OCEANOGRAPHY COMMITTEE

L:1		Administrative Report.
L:2		"Publications related to the interests of the Biological Oceanography Committee".
L:3 Ref. Hydrography and Demersal Fish Cttees	K H Koch, F Nast and M Stein	"Some interactions between hydrography, krill and fish near Elephant Island in 1977/78".
L: 4	M Wolowicz	"Characteristics of the <u>Cardium glaucum</u> (Bivalvia) population in Gdańsk Bay (growth rate, age, mortality)".
L:5	J M Węs∕awski	"Mass species of Amphipoda from Hornsund fjord (Spitsbergen)".
L:6 Ref. Shellfish Cttee	A Szaniawska	"Elements of ecological energetics of Crangon crangon (L., 1758) (Crustacea, decapoda) in Gdańsk Bay".
L:7	L M Lubian and R Establier	"Taxonomic position of a nannoplanktonic alga on the basis of its pigment composition".
L:8	N A Zharov et al.	"Application of a tracer model in the study on planktonic alga transport off the northwest African coast".
L:9	V M Ryzhov	"Features of phytoplankton development in the Murmansk current (Barents Sea)".
L:10	S S Drobysheva	"Long-term fluctuations of abundance indices of the Barents Sea euphausiids (Crustacea: Euphausiacea) according to the data from the autumn-winter survey".
* L:11	E M Kostrichkina and A K Yurkovskis	"On the coherence of the dynamics in zooplankton abundance of the Baltic proper with phosphorus and Kattegat waters advection".
L:12 Ref. Hydrography Cttee	V V Tereshchenko	"The effect of hydrometeorological factors on the transfer of eggs and larvae of the northeastern Arctic cod into the Bear Island-Spitsbergen area".
L:13	J Chojnacki and I Drzycimski	"Mesozooplankton of the Pomeranian Bay in 1977-1979".
L:14 Ref. Shellfish Cttee	J H Nichols, D B Bennett and A Lawrence	"A study of some problems relating to quantitative sampling of lobster larvae (Homarus gammarus L.)".

L:15 Ref. MEQC	A W White	"Fate and consequences of dino- flagellate toxins in marine food chains".
L:16	M Alcaraz	"Niche width and overlap of two coexisting species of <u>Acartia</u> (Copepoda: Calanoida) in the ria of Vigo (NW of Spain)".
L:17	J R Strickler, G A Paffenhöfer and M Alcaraz	"Filter feeding in copepods: observations by means of high speed motion pictures". (Film to be shown)
L:18	W Fennel	"Critical scales for phytoplankton patchiness and advection diffusion models".
L:19	L Postel	"The pelagic cross-shelf and alongshore boundaries of the NW-African upwelling region and their annual variability in terms of zooplankton biomass".
L:20	L Goeyens, A Vandenhoudt, G Decadt and W Baeyens	"The rate of utilisation of nitrate- nitrite by natural phytoplankton populations in a reactor".
L:21	J H Hecq, A Gaspar and H Picard	"Spatial pattern and biochemical content of North Sea zooplankton (Belgian coast) (1979-80)".
L:22	C Lancelot, M H Daro <u>et</u> <u>al.</u>	"Ecometabolism of the coastal area of the Southern Bight of the North Sea".
L:23	D Van Damme, R Herman <u>et</u> <u>al.</u>	"Benthic studies of the Southern Bight of the North Sea and its adjacent continental estuaries. Progress Report II. Fluctuations of the meiobenthic communities in the Westerschelde estuary".
L:24	M Bossicart	"Population dynamics of copepods in the Southern Bight of the North Sea (1977-79): use of a multicohort model to derive biological parameters".
L:25	S J Hay and J R G Hislop	"The distribution and abundance of scyphomedusae in the North Sea during the summer of 1979".
L:26 Ref. Demersal and Pelagic Fish Cttees	R Jones and E W Henderson	"Further observations on energy flow through the marine food chain".
L:27	E Bang Christensen, V Christensen and J E Beyer	"Size selective predation of larval fish".
L:28	J E Beyer and P Munk Christensen	"Food consumption by larval fish".

Biological Oceanog	raphy Cttee (ctd)	
L:29	H Hovgaard Hansen and P Munk Christensen	"Experimental determination of size specific growth rate of larval turbot".
L:30	E Kirkegaard and H Lassen	"Biomass estimates of Pseudocalanus C VI in the North Sea $1958-75$ ".
L:31	Chr. Ursin, A-M Bresta and Vagn Kr. Hansen	"On the application of the liquid scintillation counting of $^{14}\text{C-labelled}$ phytoplankton".
L:32 Ref. Demersal and Pelagic Fish Cttees	H Möller	"Scyphomedusae as predators and food competitors of larval fish".
L:33	D J Wildish	"Measurement of secondary production in marine amphipods by modified Hynes method".
L:34		Withdrawn.
L:35 Ref. Demersal and Pelagic Fish Cttees	C Chevalier	"Contribution à l'étude de la croissance des juveniles de <u>Dicentrarchus</u> <u>labrax</u> en Bretagne nord".
L:36	J E Bodammer	"Ultrastructural studies on the developing cranial cartilage in several species of larval fish".
L:37	P Schlittenhardt	"Report on comparison of chlorophyll $\underline{a}$ analysis in some laboratories".
L:38	J H Fraser	"Plankton Sheets - Editor's Report 1979-80".
L:39	R P Harris, et al.	"Trophic interactions and production processes in natural zooplankton communities in enclosed water columns. I. Results of CEPEX Foodweb I".
L:40	M R Reeve, G D Grice and R P Harris	"Trophic interactions and production processes in natural zooplankton communities in enclosed water columns. II. An assessment of the implications of the CEPEX approach for future developments in plankton ecology".
L:41 - L:43		Withdrawn.
L:44 Ref. Shellfish Cttee	M Heral, D Razet, S Maestrini et J Garnier	"Composition de la matière organique particulaire dans les eaux du bassin de Marennes-Oléron. Apport énergetique pour la nutrition de l'huître".
L:45	Y Zanette	"Intervention de quelques facteurs dans l'évolution de la biomasse des claires de Marennes-Oléron".

Biological Oceanography Cttee (	(ctd)	)

DIGIONICAL COCCUIONI	capity o vice (out)	
L:46	M Heral et J Prou	"Etude de la biomasse bactérienne dans le bassin de Marennes-Oléron".
L:47	Z Witek, M Pastuszak and A Grelowski	"The phenomena of local phytoplankton decline during the vegetative period in western Antarctic".
L:48	Z Witek, A Koronkiewicz and J G Soszka	"Some aspects of early life history of krill <u>Euphausia</u> <u>superba</u> Dana".
L:49	J Kalinowski and Z Witek	"Diurnal vertical distribution and migration of krill swarms in the western Antarctic".(REVISED)
L:50	General Secretary	"Introduction to the Plankton Chapter in Volume 36 of Annales Biologiques".
L:51	E Poggensee and J Lenz	"On the population dynamics of two brackish-water cladocera <u>Podon</u> <u>leuckarti</u> and <u>Evadne</u> <u>nordmanni</u> in Kiel fjord".
L:52	R Länge and J Lenz	"The population density of benthic diatoms on tidal flats in the German Wadden Sea".
L:53 POSTER	H Grave and H Möller	"Algal beach cast in Kiel Bight".
L:54 POSTER	G Alberti and U Kils	"The filtering-basket of <u>Euphausia</u> <u>superba"</u> .
L:55 POSTER	H Möller and T Pommeranz	"Observations on the vertical distribution of plankton and hyperbenthos organisms in the Kiel Bight".
L:56	D Stoecker, R R L Guillard and R M Kavee	"Selective predation by <u>Favella</u> ehrenbergii (Ciliata, Tintinnia) on and among dinoflagellates".
L:57		"Report of the Working Group on Primary Production Methodology, Texel, 23-25 June 1980".
L:58 Ref. Shellfish Cttee POSTER	S D Sulkin, W van Heukelem and P Kelly	"Near-shore larval assemblages as a source of recruitment for estuarine and deep-sea invertebrates".
L:59 Ref. Demersal Fish Cttee	E Durbin and A Durbin	"Some factors affecting gastric evacuation in fishes".
L:60 Ref. Demersal Fish Cttee	E Durbin, A Durbin, R Langton, R E Bowman and M Grosslein	"Analysis of stomach contents of Atlantic cod (Gadus morhua) and silver hake (Merluccius bilinearis) for the estimation of daily rations".(REVISED)

L:61 Ref. Demersal Fish Cttee	R Langton, B M North, B P Hayden and R E Bowman	"Fish food-habit studies- sampling procedures and data processing methods utilised by the Northeast Fisheries Center, Woods Hole Laboratories, USA".
L:62 Ref. Demersal Fish Cttee	W Hahm and R Langton	"Prey selection based on predator/prey weight ratios for some Northwest Atlantic fish".
L:63 Ref. Demersal Fish Cttee	M Pennington, R E Bowman and R Langton	"Variability of the weight of fish stomach contents and its implications for fish food habit studies".
L:64	E B Cohen, M Grosslein, M Sissenwine and F Steimle	"A comparison of energy flow on Georges Bank and in the North Sea".
L:65	M P Fahay	"A guide to the early stages of marine fishes occurring in the western Atlantic with emphasis on species found north of Cape Hatteras (Abstract)".
L:66	W Smith, D McMillan, P Rosenberg, M Silverman and A Wells	"Seasonal and annual changes in the distribution, abundance and species composition of fish eggs and larvae off the northeastern United States, 1977-79"
L:67	K Sherman and C Jones	"The zooplankton component of a Northwest Atlantic ecosystem".
L:68	H P Jeffries, R Lambert and D Lowenthal	"Biochemical correlates of complexity and change in plankton communities".
L:69 Ref. Pelagic Fish Cttee	R Lasker, J Peleaz and R M Laurs	"The use of satellite infrared imagery for describing ocean processes in relation to spawning of the northern anchovy (Engraulis mordax)".
L:70 Ref. Hydrography Cttee	R H Douglass	"Environmental issues arising from large-scale deployment of OTEC systems - an engineer's perspective".
L:71	F Creutzberg and F van Leeuwen	"The lifecycle of <u>Crangon</u> <u>allmanni</u> in the southern North Sea".
L:72	H G Fransz	"Zooplankton development in a patch of juvenile plaice during 26 February - 18 March 1980 in the Southern Bight of the North Sea".

## Reference Papers

### Reference Papers to the Biological Oceanography Committee

B:28 Fish Capture Cttee	N Klages and F Nast	"The net selection of Antarctic krill by the 1216 🛪 krill trawl".
B:30 Fish Capture Cttee	M T Törmä	"Assessment of Antarctic krill catch rates using computer modelling".
C:2 Hydrography Cttee	Ed.: A Svansson	"Final Report of the ICES/JONSIS Working Group on JONSDAP '76".
C:3 Hydrography Cttee	Ed.: G Pichot	"Papers presented at the JONSDAP '76 meeting, Liège, 29 April - 2 May 1980".
C:17 Hydrography Cttee	S B Tijssen and A Eijgenraam	"Diurnal oxygen rhythm in the Southern Bight of the North Sea: net and gross primary production in April 1980 in a phaeocystis bloom".
C:35 Hydrography Cttee	S R Ramp, R J Schlitz and R Redwood Wright	"Northeast Channel flow and the Georges Bank nutrient budget".
E:49 MEQC	J M Davies, I E Baird, L C Massie and A P Ward	"Chemical and productivity measurements in an enclosed water column".
E:54 MEQC	R J R Grainger, C Duggan, D Minchin and D O'Sullivan	"Fisheries related investigations in Bantry Bay following the Betelgeuse disaster".
E:58 MEQC	J M Capuzzo	"The effects of pollutants on marine zooplankton at deepwater dumpsite 106; toxic effects and bioaccumulation of Dupont Edgemoor waste".
G:18 Demersal Fish Cttee	L Sullivan	"Distribution, abundance, and mortality estimates of larval butterfish, Peprilus triacanthus, from MARMAP surveys, 1977 and 1978".
H:33 Pelagic Fish Cttee	A Johannessen	"Predation on herring (Clupea harengus) eggs and young larvae".
H:52 Pelagic Fish Cttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1980".

### Reference Papers

K:32 F Redant Shellfish Cttee "Population dynamics of brown shrimp (<u>Crangon crangon</u>) in the Belgian coastal waters. 1. Consumption-production model".

K:33 Shellfish Cttee F Redant

"Population dynamics of brown shrimp (Crangon crangon) in the Belgian coastal waters. 2. Predation mortality".

### M - ANADROMOUS AND CATADROMOUS FISH COMMITTEE

M:1		Administrative Report.
<b>∦ M:</b> 2		"Report on the 26th Meeting of the Baltic Salmon Working Group, Warsaw, Poland, 4 October 1979".
∦ M:3		"Baltic Salmon Assessment Working Group, 10-15 March 1980".
M:4		"Publications related to the interests of the Anadromous and Catadromous Fish Committee".
M:5	T Pussakas and F-W Tesch	"Karyological and gonadal sex of eels (Anguilla anguilla ) in the German Bight and the lower River Elbe".
M:6	U Löwenberg	"An assessment of the eel (Anguilla anguilla) stocks in the German Bight, as evaluated by commercial and experimental fishery".
M: 7	F-W Tesch	"Report on the available data of the Atlantic Anguilla larvae, presented to the ICES Planning Group for the Atlantic Eel Expedition".
M:8	I N Grinyuk <u>et</u> al.	"Reproduction of Atlantic salmon $(\underline{Salmo}\ \underline{salar}\ L_{ullet})$ on the Kola Peninsula".
<b>M:</b> 9	J K Bailey, M I Buzeta and R L Saunders	"Returns of three year classes of sea ranched Atlantic salmon of various river strains and their hybrids".
M:10		"Report of the Working Group on North Atlantic Salmon, 30/4 - 3/5 1979 and 15-18/4 1980".
M:ll		"Appendix to the Report on the Cooperative Sea Trout Tagging".
₩ M:12		"Report on the Baltic Sea Trout Transfer Experiment".
M:13	E Ikonen	"Migration of the river-spawning whitefish in the Gulf of Finland".
M:14	E L Bakshtansky et al.	"Peculiarities in adaptation of hatchery and wild Atlantic salmon smolts to brackish water (13%)".
M:15	D J Solomon	"Pacific salmon in the North Atlantic; a history and assessment of current status".
M:16	V Bjerknes and A B Vaag	"The status of pink salmon in North Norway".

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M:17	G W Smith et al.	"Orientation and energetic efficiency in the offshore movement of returning Atlantic salmon".
M:18	J A Pope	"The modelling of time series of catches of salmon".
<b>∦</b> M:19	H Lassen	"Simulation of some Baltic salmon exploitation patterns".
M:20	J D McCleave and R C Kleckner	"Up-estuary migration of glass eels (Anguilla rostrata) in relation to tidal flow".
M:21	R C Kleckner and J D McCleave	"Spatial and temporal distribution of Anguilla rostrata and Anguilla anguilla Leptocephali found in North American ichthyoplankton collections".
M:22	D G Reddin	"Change in weight of Atlantic salmon from the West Greenland home waters fisheries".
M:23	D G Reddin	"Change in weight of Atlantic salmon at West Greenland and its relationship to numbers of fish caught per tonne".
M:24	D G Reddin	"Non-catch fishing mortality at West Greenland and in home water fisheries".
M:25	D G Reddin and R F Bu <b>r</b> fitt	"The stock composition of Atlantic salmon off West Greenland in 1979".
M:26	D G Reddin and R F Burfitt	"Length, weight, sex and age of Atlantic salmon (Salmo salar) of North American and European origin caught at West Greenland in 1979".
M:27	J B Dempson	"Present status of pink salmon (Oncorhynchus gorbuscha) in the Newfoundland region".
M:28	J B Dempson	"Application of a stock/recruitment model to assess the Labrador Atlantic salmon fishery".
M:29	E M P Chadwick	"Atlantic salmon kelt ( $\underline{\text{Salmo}}$ $\underline{\text{salar}}$ L.) as an index of spawners".
M:30		"Report of the Joint ICES/EIFAC Working Group on Eels, Hamburg, 24-26 June 1980".
M:31		Withdrawn.
M:32	L P Hansen	"Tagging and recaptures of net marked and undamaged Atlantic salmon in two sea localities and two rivers in Norway".

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M:33	L P Hansen	"Net mark registration on Atlantic salmon and sea trout in Norwegian rivers and coastal areas 1979".
М:34	S O Roald	"Net marks on Atlantic salmon (Salmo salar) in Norwegian coastal areas.  Preliminary report on gross, histological, serological and bacteriological signs".
M:35	G Rasmussen	"Comparisons of different types of tags from the recaptures of marked sea trout (Salmo trutta L.) in Denmark".
M:36	J Browne	"The effects of the West Greenland fishery on Irish stocks".
M:37	E Twomey	"A comparative study of the length and weight of Atlantic salmon in an off-shore drift net fishery, an inshore seine net and a fixed trap fishery in Irish waters".
M:38	J A Ritter, T L Marshall, D G Reddin and W G Doubleday	"Assessment of the impact of the West Greenland Atlantic salmon, <u>Salmo</u> <u>salar</u> , fishery on stocks and catches in North America".
M:39	G Fontenelle, D Jobert et L Jomier	"Observations biologiques et économiques sur le grossissement en estuaire de truite arc-en-ciel (Salmo gairdneri R.) en cage flottante rotative".
M:40	P Elie et G Fontenelle	"Caractéristiques de la pêche professionnelle de la civelle d'Anguilla anguilla L. dans l'estuaire de la Loire (Quartier de St. Nazaire) durant la saison de montée 1976-77".
M:41	Y Harache	"Environmental aspects of coho salmon (Oncorhynchus kisutch). Introduction for aquaculture in France".
M:42		"Request for further advice on Atlantic salmon".
M:43		POTMOII

# Reference Papers to the Anadromous and Catadromous Fish Committee

E:60 MEQC		"Report of the ICES Working Group on the Introduction of Non-Indigenous Marine Organisms" - with a Supplement.
F:8 Mariculture Cttee	B D Glebe, W Eddy and R L Saunders	"The influence of parental age at maturity and rearing practice on precocious maturation of hatchery-reared Atlantic salmon parr".

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### Reference Papers

F:18 B Eckstein,
Mariculture Cttee V Hilge and

S Cohen

"Formation of  $5\beta$  - androstanes as the major metabolites of testicular

tissue of human chorionic gonadotropin treated Anguilla anguilla (L.) at the

silver stage".

F:26
Mariculture Cttee

K Tiews

"Report on the EIFAC Symposium on New Developments in the Utilisation of Heated Effluents and of Recirculation Systems for Intensive Aquaculture, supported by ICES".

### N - MARINE MAMMALS COMMITTEE

N:1		Administrative Report.
N:2		"Publications of interest to the Marine Mammals Committee, 1979".
N:3	R Duguy	"Rapport annuel sur les cétacés et pinnipèdes trouvés sur les côtes de France - année 1979".
N:4	R Duguy et E Hussenot	"Nouvelles données sur <u>Tursiops</u> <u>truncatus</u> des côtes françaises atlantiques".
N:5	J C Rey et O Cendrero	"Les cétacés et pinnipèdes vus en mer et échoués sur les côtes espagnoles pendant 1979 et premier sémestre de 1980".
N:6	A Collet	"Données nouvelles sur la répartition des petits delphinidés, notamment <u>Delphinus delphis</u> , dans le Nord-Est Atlantique".
N:7	J H Prime	"The current status of the Farne Islands grey seal population".

### Reference Papers to the Marine Mammals Committee

E:32 MEQC	P Johansen, F Kapel and I Kraul	"Heavy metals and organochlorines in marine mammals from Greenland.
E:41 MEQC	J McKie, I M Davies and G Topping	"Heavy metals in grey seals ( <u>Halichoerus</u> grypus) from the east coast of Scotland".
E:42 MEQC	C R Falconer, I M Davies and G Topping	"Selected trace metals in porpoises (Phocoena phocoena) from the north-east coast of Scotland".
E:55 MEQC	D E Sergeant	"Levels of mercury and organochlorine residues in tissues of sea mammals from the Gulf of St. Lawrence estuary".
E:66 MEQC	R Wagemann, N B Snow, A Lutz and J B Kemper	"Heavy metals in the narwhale Monodon monoceros from the Canadian Arctic".

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