## 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		"Reports by Observers from Collaborating Organisations".
Gen:1.a		"Brief Reports on Symposia and Workshops arranged by ICES 1978/79" (including Doc. C.M.1979/E:68).
Gen:2		"Activities of the International Council for the Exploration of the Sea 1978/79".
Gen:3		"Advance Release of Tables 1-5 and K of Bulletin Statistique, Vol. 63, 1978".
Gen:4		"Election of Committee Chairmen at the $67  \text{th}$ Statutory Meeting". (E+F)
Gen:5		"Note on Recommendations and Reports". $(E+F)$
Gen:6	A Saville	"Shortcomings and Gaps in Data required for Stock Assessment Purposes".
Gen:7 (Symp.)	G Kullenberg	"On the potential input of physical oceanography to the elucidation of processes in other marine disciplines".
Gen:8	Compiled by ICES Hydrographer	"Catalogue of regularly issued marine environmental data products for the ICES area. 1979 issue".
Gen:9 (Symp.)	M Whitfield	"The role of chemical reactor theory in integrated studies of saline waters".
Gen:10		"Possibilities for a dialogue on fishery management".
Gen:ll (Symp.)	D H Cushing	"Production in the central gyres of the Pacific".

#### Del - DELEGATES MEETINGS

Del:1*	"Audited accounts for 1977/78 with balance sheet per 31/10 1978".
Del:2*	"Preliminary report on the administration 1978/79".
Del:3*	"Administrative reports of area- and subject Committees 1978" - please see under the respective Committees.
Del:4 <sup>*</sup>	"Estimated accounts for the financial year 1978/79".
Del:5*	"Budget for the financial year 1979/80". (E+F)
Del:6*	"Forecast Budget for the financial year $1980/81$ ". (E+F)
Del:7*	"Proposals for amendment of the Rules of Procedure". (E+F)
Del:8*	"Elections to be undertaken by the Council at the 67th Statutory Meeting". (E+F)
Del:9*	"The Council's computer problems".
Del:10*	"Information on the free distribution of the Council's publications".
Del:11*	"Arrangements for international fisheries research".
Del:12*	"Possibilities for savings on future budgets".
Del:13*	"Job descriptions for the Secretariat staff".

<sup>\*</sup> For Delegates only.

#### FINANCE COMMITTEE Fi -

Fi:1\*

Agenda for the Finance Committee.

Fi:2\*

"Writing off of non-received payments".

#### ADVISORY COMMITTEE ON FISHERY MANAGEMENT

ACFM:1\*

Agenda for the Advisory Committee on Fishery Management.

#### ADVISORY COMMITTEE ON MARINE POLLUTION

ACMP:1\*

Agenda for the Advisory Committee on Marine Pollution.

#### 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\*

"Responsibilities of Editors of Rapports et Procès-Verbaux volumes".

Pub:5\*

"Publication schedule for Journal

du Conseil".

#### CONSULTATIVE COMMITTEE

A:1\*

Agenda for the Consultative Committee.

A:2\*

"Poster Sessions at Statutory Meetings".

A:3\*

"Timing of meetings of Working Groups and of the Council itself".

<sup>\*</sup> For the relevant Committees only.

# B - FISHING TECHNOLOGY COMMITTEE

B:1		Administrative Report.
B:2	P J G Carrothers	"The effect of load distribution on the mathematical planforms of trawl frame lines".
B:3		"Report of the Working Group on Research on Engineering Aspects of Fishing Gear, Vessels and Equipment".
B:4		"Working Group on Reactions of Fish to Fishing Operations, 9-10 May 1979, Göteborg".
B:5 Ref. Pelagic Fish Cttee	T J Pitcher	"The role of schooling in fish capture".
B:6 Ref. Pelagic Fish Cttee	K Lange	"Full scale trials with long-rope trawls".
B:7 Ref. Shellfish Cttee	H Mohr and G Rauck	"First results of German experiments with a selective shrimp trawl".
B:8		"Report of the Data Collection Working Group Meeting in Gothenburg, Sweden, 9 May 1979".
В:9	A C Burd and M R Vince	"Experiments with beam trawls".
B:10	G Kurc	"Rapport général sur les réunions du Comité de Technologie des Pêches à Göteborg (Suède), 7 au 11 mai 1979".
		"General Report - Fishing Technology Committee Working Groups, Göteborg, Sweden, 7 to 11 May 1979".
B:11 Ref. Demersal and Pelagic Fish Cttees	D J Garrod	"Fishing performance in the UK fleet 1974-77".
B:12	A Watson, R Millner and B Mumford	"Selection of sole (Solea solea (L.)) by trammel nets and the effect of mesh size on catches".
B:13 Ref. Demersal Fish Cttee	R Guichet	"Sélectivité des poches en polyamide dans la pêche de la sole (Golfe de Gascogne, 1979)".
B:14 Ref. Shellfish Cttee	J Bertrand et J Kopp	"Principaux types d'engins fixes utilisés le long des côtes du Cotentin pour la capture des crustacés et des mollusques".

# Fishing Technology Cttee (ctd)

		B:15		"Preliminary survey report on Joint USA/USSR meeting on Hydroacoustical Methods (7 July, 1979)".
		B:16 Pelagic Cttee	S H í Jakupsstovu	"Faroese experiments with very big meshed trawls for blue whiting fishery".
	ŧ	B:17	P A M Stewart	"The selection of pulse characteristics for electrical fishing experiments from measurements on direct muscle stimulation".
		B:18 Pelagic Cttee	K Olsen	"Observed avoidance behaviour of herring in relation to passage of an echo survey vessel".
; )		B:19 Demersal Cttee	K K Angelsen, K Haugen and S Floen	"The catching efficiency of cod gill- nets with different hanging ratio (E) and different floatline buoyancy".
		B:20	K K Angelsen and I Huse	"Qualitative contrast comparisons of differently coloured gillnets".
		B:21 Demersal Cttee	A Fernø and J W Valdemarsen	"Preliminary studies on the influence of bottom obstructions and topography on the availability of demersal fish for gillnet fishing in the North Sea".
		B:22 Demersal Cttee	I Huse	"Fish behaviour studies as an aid to cod and haddock longline hook design".
		B:23 Pelagic Cttee	B Isaksen	"Estimates of capelin trawl efficiency by comparing the available fish with the actual catch".
j		B:24 Pelagic Cttee	B Isaksen, H Jensen and S Olsen	"Recent developments on blue whiting trawls in Norway".
		B:25	L Karlsen	"Fullscale experiments with a new midwater 3-foil type and standard Waco and süberkrüb otterboards".
		в:26	W Dickson	"Trawl drag area and netting geometry".
		B:27	J W Valdemarsen	"Behaviour aspects of fish in relation to oil platforms in the North Sea".
		B:28	W Seidel	"Development of a sea turtle excluder shrimp trawl".

# Fishing Technology Cttee (ctd)

# Reference Papers to the Fishing Technology Committee

G:51 Demersal Fish Cttee	J Dalen and O M Smedstad	"Acoustic method for estimating absolute abundance of young cod and haddock in the Barents Sea".
K:29 Shellfish Cttee	J B Perodou et R Pinget	"Observations sur la pêche de la seiche <u>Sepia officinalis</u> au casier en baie de Vilaine".
K:30 Shellfish Cttee	A Charuau	"Sélectivité des fonds de chaluts en polyéthylène dans la pêche de la langoustine".

#### C - HYDROGRAPHY COMMITTEE

C:1 Ref. Marine Environmental Quality Cttee		"First Report of the Marine Chemistry Working Group, Lisbon, 8-11 May 1979".
C:2 Ref. Marine Environmental Quality Cttee	G Dahlmann, H Gaul and G Weichart	"Investigations of temperature, salinity, oxygen, pH, alkalinity and organic pollutants in the Baltic Sea during BOSEX 77".
C:3		Withdrawn.
C:4 Ref. Marine Environmental Quality Cttee		"Trace metals in Baltic Sea water during BOSEX 77".
C:5 Ref. Anacat. Cttee	G Wegner	"First hydrographic results from the Sargasso Sea expedition with FRV 'Anton Dohrn', 19.3 9.5.1979".
<b>C:</b> 6	J Malicki and D Wielbińska	"Meteorological research of the Baltic Sea area and prospects of their further development".
C:7	A Ju <b>ś</b> kiewicz	"Air-temperature transformation over the Baltic Sea during BOSEX 77".
C:8	E Skrzypczak and D Wielbińska	"Wind field pattern and moisture content over Southern Baltic during BOSEX 77".
C:9 Ref. Marine Environmental Quality Cttee	E Andrulewicz, A Brzezińska and A Trzosińska	"Some aspects of the chemical composition of particulate matter in the Southern Baltic".
C:10	Z Catewicz	"Mesoscale variability of currents in the Southern Baltic Sea".
C:11	A Jankowski and Z Kowalik	"Diagnostic model of wind- and density-driven currents in the Baltic Sea".
C:12	A Grelowski and M Pastuszak	"Preliminary determination of occurrence and movements of water masses in the region of South Georgia Island".
C:13	A Majewicz	"Note on water dynamic in the frontal zone of Brazil and Falkland currents".
C:14 Ref. Biol. Oceanography Cttee.	B Szpiganowicz	"The content of biogenic elements and oxygen in the frontal zone of the Brazil and Falkland currents".

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Hydrography Cttee	(ctd)	
C:15	A Furtak and J Wysocki	"Distribution of water temperature on Flemish Cap Bank in spring 1978".
C:16	T S Jacobsen	"Recent results on the water exchange of the Baltic".
C:17		"Recommendation from the International Workshop on Remote Sensing. Sea truth data. (ISPRA, Sept. 12-14,1978)".
C:18	B Hansen	"Residual flow and temperature on the Faroe plateau during the first half of 1978 in relation to the circulation".
C:19	0 V Tyagunova	"Large-scale temporal variations of hydrological conditions in the Denmark Strait and adjacent areas".
C:20	S H Fonselius	"Intercomparison of hydrographical measurements during the BOSEX-77".
C:21 Ref. Pelagic Fish Cttee	E Hagen and R Weiss	"Mesoscale coastal upwelling dynamics off the NW-African coast and hypothetic relations to the chub mackerel concentrations".
C:22	W Matthäus	"Long-term variations of the primary halocline in the Gotland Basin".
C:23	N Michelsen	"Analysis of long-term meteorological field variations in the upwelling area along the NW-African coast".
C:24 Ref. Biol. Oceanography Cttee	D Nehring	"Relationships between salinity and increasing nutrient concentration in the mixed winter surface layer of the Baltic from 1969-78".
C:25 Ref. Biol. Oceanography Cttee	D Nehring and A Wilde	"Investigations on the atmospheric transport of nutrients into the Baltic".
C:26 Ref. Biol. Oceanography Cttee	J W Ramster	"Some of the lessons learnt from JONSDAP '76 in the planning and organisation of large-scale cooperative oceanographic exercises".
Ca:27	J W Ramster and P A Gurbutt	"A near-bed intercomparison in 1172 metres of water of an Aanderaa RCM4 current meter and a Plessey 9021 current meter".

C:28 K Grasshoff "The carbon dioxide problem, a challenge for marine chemists".

current meter".

Hydrography	Cttee (ctd)	
C:29		"Report on the meeting of ICES Working Group on Aerospace Remote Sensing (Valbonne, France, 13-14 June, 1979)".
C:30	Jens Smed	"Report on the Joint IOC/WMO Seminar and Workshop on Oceanographic Products and the IGOSS Data Processing and Services System (IDPSS)".
C:31	ICES Hydrographer	"Activities of the ICES Service Hydrographique during 1978/79".
C:32	Jens Smed	"Report on the 9th Session of the IOC Working Committee on International Oceanographic Data Exchange".
C:33	U Stefánsson	"Particulate matter in Icelandic surface waters".
C:34	A Edwards, D J Ellett, P Kruseman and G J Prangsma	"Temperature-salinity variability in the northern Rockall Trough during JASIN 1978".
C:35	D J Ellett, H D Dooley and H W Hill	"Is there a North-East Atlantic slope current?".
C:36	G A Becker	"Mean net surface heat exchange of the North Sea".
C:37	ICES Hydrographer	"ICES catalogue of computer programmes in physical and chemical oceanography 1979 issue".
C:38	Jens Smed	"Introduction to the Hydrography section of 'Annales Biologiques', Vol. 35 (1978)".
0:39	ICES Hydrographer	"Provisional programme of work for ICES Service Hydrographique,1979/80".
C:40	A M Davies	"Comparison of computed and observed residual currents during JONSDAP '76: preliminary results".
C:41	Geophysical Inst., Div. of Physical Oceanogr., Bergen	"Comments on the IAPSO S.U.N. WG's Preliminary Draft Recommendations".
C:42	J Szaron	"Preliminary transport computations of water, salt and nutrients through the Göteborg-Frederikshavn (GF) section in the northern Kattegat, based on measurements 1975-77".

Hydrography Cttee (ctd)				
C:43	M Perttilä and V Tervo	"Distribution of total organic carbon in the Baltic Sea water in 1977-78".		
C:44	M Perttilä	"Comments on the intercomparison of the chemical data of the BOSEX-77".		
C:45	P Mälkki	"Regional survey of current variability in the Archipelago Sea".		
C:46 Ref. Marine Environmental Quality Cttee	A Voipio and L Niemistö	"Sedimentological studies and their use in pollution research".		
C:47	J C Nihoul, Y Runfola and B Roisin	"Shear effect dispersion in a shallow tidal sea".		
C:48	A Loffet and A Bah	"Air-sea interactions".		
C:49	G Belhomme and F C Ronday	"Hydrodynamic models for very shallow coastal seas. Application to the Belgian coast".		
C:50*		"Ninth Report of the Joint Panel on Oceanographic Tables and Standards".		
C:51*	ICES Hydrographer	"Fourth Edition of Manual on ICES Oceanographic Punch Cards".		
C:52	T Gytre	"The performance of a three axis ultrasonic current sensor when integrated into an oceanographic data acquisition system".		
C:53	T Gytre	"A simple field instrument for measuring and recording up to 16 observations of current speed and direction".		
C:54	S R Ramp and W R Wright	"Northeast Channel flow: the view after one year's measurements".		
C:55		"ROSCOP summary of U.S. cruises in the ICES area 1978".		
C:56	ICES Hydrographer	"Notes on the series 'ICES Oceanographic Data Lists and Inventories'".		
C:57*	R E Moffatt, E G Trammel, Jr., C L Sazama and A L Roberson	"World Data Centre A (Oceanography). Oceanographic data exchange 1978".		

<sup>\*</sup> For the relevant Committee only.

# Hydrography Cttee (ctd)

# Reference papers

# Reference Papers to the Hydrography Committee

E:8 Marine Environmental Quality Cttee	G Topping, J M Bewers and P G W Jones	"Summary of past and present measurements of selected trace elements in sea water in the Oslo Commission and ICNAF areas".
E:37 Marine Environmental Quality Cttee	J M Bewers, P A Yeats, J Dalziel and J L Baron	"Report of the Fourth Round Inter- calibration for trace metals in sea water".
E:49 Marine Environmental Quality Cttee	J Piuze and M Tremblay	"Mercury in the waters of the St. Lawrence estuary, Quebec, Canada".
E:63 Marine Environmental Quality Cttee	V Klemas	"Remote sensing of coastal fronts and their effects on pollutant dispersion".
H:42 Pelagic Fish Cttee	Jens Smed	"Bottom temperature and salinity in the North Sea during the ICES Young Herring Survey in February and March 1979".
H:59 Pelagic Fish Cttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1979".
L:36 Biol.Oceanogr. Cttee	W R Wright and R G Lough	"The Georges Bank larval herring patch study of 1978: a preliminary report".

# D - STATISTICS COMMITTEE

D:1		Administrative Report.
D:2	ICES Statistician	"ICES List of Species Items (as at 31 March 1979)".
D:3		"Report of the Working Group on the Eventual Establishment of an ICES ADP System for Fishery Statistics, Charlottenlund, 5-9 March 1979".
D:4	ICES Statistician	"Progress Report".

# E - MARINE ENVIRONMENTAL QUALITY COMMITTEE

		E:1		Administrative Report.
		E:1/Append	dix 1	"Information about sand and gravel extraction, 1978".
٠		E:2		"Report of the meeting of the ICES/SCOR Working Group on the Study of the Pollution of the Baltic, Tallinn, USSR, 23-25 January 1979".
		E:3		"Report of the ICES Working Group on Effects on Fisheries of Marine Sand and Gravel Extraction, 21-23 March, 1979, Rijswijk (Z-H), the Netherlands".
į		E:4	R T E Schüttenhelm	"The superficial geology of the Dutch sector of the North Sea".
<i>)</i> •	Ref.Pe	E:5 lagic Fish	S J de Groot	"The consequence of marine gravel extraction for the spawning of herring".
		E:6	J E Portmann and L Woolner	"Residue monitoring: biological factors of importance: results of regression analyses".
		E:7	G Topping	"Summary report on a 5th ICES trace metal intercomparison exercise for biological tissue".
	Ref. H	E:8 ydrography	G Topping, J M Bewers and P G W Jones	"Summary of past and present measurements of selected trace elements in sea water in the Oslo Commission and ICNAF areas".
		E:9		"Recent publications of interest to the Marine Environmental Quality Committee".
).		E:10		"Overall report of ad hoc Group on Oil Pollution Incidents, based on meetings in Brest, France, 2-9 June 1978 and
				Charlottenlund, 13-15 March 1979".
		E:11		Withdrawn.
		E:12	H von Westernhagen, V Dethlefsen and H Rosenthal	"Combined effects of Cd, Cu, and Pb on developing herring eggs and larvae".

# Marine Environmental Quality Cttee (ctd)

E:13 Ref. Demersal and Pelagic Fish Cttees	H Möller	"Review of the geographical distribution of fish diseases in the northeast Atlantic".
E:14	M Baeteman and W Wyncke	"Phenolic compounds in the water and marine organisms off the Belgian coast".
E:15	R J Law	"Hydrocarbon concentrations in water and sediments from the North Sea and English Channel".
E:16	C Osterroht and V Smetacek	"Vertical transport of chlorinated hydrocarbons by sedimentation of particulate matter in Kiel Bight".
E:17	A V Holden	"Summary report on 1978/79 ICES Intercalibration Exercise for Organochlorine Analyses".
E:18	A Franklin	"The immigrant Japanese seaweed Sargassum muticum in U.K. waters".
E:19	M F Hovmand	"Atmospheric heavy-metal deposition on land and sea".
E:20		Withdrawn.
E:21	R A A Blackmann,	"Uptake and loss of cadmium under
	J Bonnett and J E Thain	field conditions by the oyster (Ostrea edulis L.)".
E:22 Ref. Mariculture, Shellfish and Anacat Cttees	J Bonnett and	field conditions by the oyster
E:22 Ref. Mariculture, Shellfish and	J Bonnett and	field conditions by the oyster (Ostrea edulis L.)".  "Report of the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April
E:22 Ref. Mariculture, Shellfish and Anacat Cttees	J Bonnett and J E Thain R Murchelano	field conditions by the oyster  (Ostrea edulis L.)".  "Report of the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April 1979".  "Some observations on an ulcer disease of red hake, Urophycis
E:22 Ref. Mariculture, Shellfish and Anacat Cttees E:23  E:24 Ref. Mariculture	J Bonnett and J E Thain  R Murchelano and J Ziskowski  R Murchelano	field conditions by the oyster  (Ostrea edulis L.)".  "Report of the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April 1979".  "Some observations on an ulcer disease of red hake, <u>Urophycis</u> chuss, from the New York Bight".  "Fish disease surveys in the

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Marine Environmenta	l Quality Cttee (ctd)	
E:27	H C Freeman and G Sangalang	"A preliminary study of the effect of di-2-ethylhexyl phthalate on the Atlantic cod (Gadus morhua)"
E:28	D W McLeese, S Ray and C D Metcalfe	"Chlorinated hydrocarbon pesticides and polynuclear aromatic hydrocarbons in sediments and invertebrates from three coastal areas in New Brunswick, Canada, a natural bioassay".
E:29	S Ray, D W McLeese and C D Metcalfe	"Heavy metals in sediments and invertebrates from three coastal areas in New Brunswick, Canada, a natural bioassay".
E:30	C M Morrison and P H Odense	"The use of scanning electron microscope in assessing the condition of gill lamellae, with particular reference to the effects of cadmium on the gill of brook trout (Salvelinus fontinalis)".
E:31 Ref. Mariculture Cttee	C M Morrison, R G Appy, G Shum, C Annand, and P H Odense	"Histology and the incidence of pseudobranch tumours in Atlantic cod (Gadus morhua) in Halifax harbour".
E:32 Ref. Mariculture Cttee	M Gutierrez	"On the staining of capsules and filaments of Myxobolus sp. and Kudoa sp. parasite protozoa on certain marine fishes".
E:33	R Establier and M Gutierrez	"Accumulation and histopathologic effects of cadmium to the Lisa, <u>Mujil auratus</u> Risso".
E:34	A Lucas et S le Roux	"Les embryons et larves de bivalves organismes-tests, vis-à vis de la toxicité des hydro- carbures".
E:35	L Brügmann	"Trace metals in the central tropical Atlantic Ocean".
E:36		"Report of the Fifth Meeting of the Working Group on Marine Pollution Baseline and Monitorin Studies in the North Atlantic, Lisbon, 15-17 May 1979".

E:37
Ref. Hydrography
Cttee

J M Bewers,
P A Yeats,
J Dalziel
and J L Baron

"Report of the Fourth Round Intercalibration for trace metals in sea water".

Marine Environment	cal Quality Cttee (ctd)	
E:38	R F Addison	"An assessment of the hazard to the marine environment of a PCB replacement based on butylated monochlorodiphenyl ethers".
E:39 Ref. Marine Mammals Cttee	J C Duinker and M Th. J Hillebrand	"Mobilization of organochlorines from female lipid tissue and transplacental transfer to fetus in a harbour porpoise (Phocoena phocoena) in a contaminated area".
E:40 Ref. Marine Mammals Cttee	J C Duinker, M Th. J Hillebrand and R F Nolting	"Organochlorines and metals in harbour seals (Dutch Wadden Sea)".
E:41	P F Larsen and L F Doggett	"An overview of nearshore environmental research in the Gulf of Maine".
E:42	R L Lippson and A J Lippson	"The condition of Chesapeake Bay - an assessment of its present state and its future".
E:43	D Maurer	"A brief review of the status of selected pollutants (pesticides, hydrocarbons, trace metals) in relation to benthic invertebrates in Delaware Bay".
E:44	K McCarthy, C Gross, R Cooper, R Langton, K Pecci and J Uzmann	"Biology and geology of Jeffreys ledge and adjacent basins: an unpolluted inshore fishing area, Gulf of Maine, NW Atlantic".
E:45	J B Pearce	"Raritan Bay - a highly polluted estuarine system".
E:46	D K Phelps	"Narragansett Bay - a gradient of stress?"
E:47	R N Reid	"Contaminant concentrations and effects in Long Island Sound".
E:48	R L Swanson, H M Stanford and D M Goodrich	"A monitoring plan for the New York Bight".
E:49 Ref. Hydrography Cttee	J Piuze and M Tremblay	"Mercury in the waters of the St. Lawrence estuary, Quebec, Canada".
E:50	D Cossa, E Bourget and J Piuze	"Age dependence of trace metal content in Mytilus edulis L.".

Marine Environment	al Quality Cttee (ctd)	
E:51	J E Solbakken and K H Palmork	"Accumulation and metabolism of phenanthrene in rainbow trout (Salmo gairdneri)".
E:52	P Tulkki	"Oil spill of the tanker 'Antonio Gramsci'. Measures and observations in Finland".
E:53	K H Palmork and J E Solbakken	"Accumulation and metabolism of phenanthrene in Norway lobster (Nephrops norvegicus)".
E:54 Ref. Demersal Fish Cttee	G Conan and M Friha	"Impact of the 'Amoco Cadiz' oil spill on the growth of soles and plaice in the 'Aber' estuaries of Northern Brittany".
E:55	J N Kremer and P Kremer	"Ecological simulation model of Los Angeles harbor receiving waters (California, USA)".
Ŭ <b>E</b> :56	S W Nixon and V Lee	"Spatial and temporal pollution gradients in Narragansett Bay".
<b>E</b> :57	M E Q Pilson, G Vargo, C Hunt, J Gearing, P Gearing and K Hinga	"Use of MERL microcosms to study the fates and effects of marine pollutants".
E:58	J M Bouquegneau, F Noël-Lambot and A Disteche	"Fate of heavy metals in experimental aquatic food chains. Uptake and release of Hg and Cd by some marine organisms. Role of metallothioneins".
E:59	G Gillain, G Duyckaerts and A Disteche	"The determination of trace metals in sea water and suspended matter by classical anodic stripping (Zn, Cd, Pb, Cu) or differential pulse anodic stripping voltammetry with a hanging mercury drop electrode (Zn, Cd, Pb, Cu, Sb and Bi). An approach to speciation".
E:60 Ref. Biol. Oceanogr.Cttee	J P Mommaerts, W Baeyens and G Decadt	"Synthesis of research on nutrients in the Southern Bight of the North Sea".
E:61	W Baeyens, G Decadt and I Elskens	"Determination of dissolved, particulate and total mercury in the watercolumn of the Southern Bight of the North Sea, with adapted analytical procedures".

# Marine Environmental Quality Cttee (ctd)

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E:62	A Calabrese, F P Thurberg, E Gould and J T Graikoski	"Ocean Pulse: some physiological, biochemical, and bacteriological activities, Year 2 (1978-1979)".
E:63 Ref. Hydrography Cttee	V Klemas	"Remote sensing of coastal fronts and their effects on pollutant dispersion".
E:64	J B Pearce	"A preliminary oil spill response plan for coastal and oceanic waters off the northeastern United States".
E:65	A V Holden	"Surveys of organic chemicals in the marine environment".
E:66	A Eleftheriou and D J Murison	"Biological baseline studies of an oil-related development area in the Shetland Islands".
E:67	D C Moore	"A baseline study of the physico- chemical and benthic characteristics of two sewage sludge dumping grounds outside the Firth of Forth, Scotland".
E:68		See Doc. C.M.1979/Gen:1.a of which this paper is part ("Report on the Workshop on the Problems of Monitoring Biological Effects of Pollution in the Sea, Beaufort, 26 February - 3 March, 1979)".
E:69	R P W M Jacobs	"Effects of the 'Amoco Cadiz' oil spill on the seagrass community at Roscopp (France) with special reference to the benthic fauna".
E:70	John S Gray and T Brattegard, assisted by: T Bokn, P Hognestad, S Skreslet and	"Programme to assess the ecological effects of oil spills in coastal areas of Norway".
	W Wader	

W Wader

# Marine Environmental Quality Cttee (ctd)

## Reference papers

#### Reference Papers to the Marine Environmental Quality Committee

C Hydrogra Cttee	:1 phy		"First Report of the Marine Chemistry Working Group, Lisbon, 8-11 May 1979".
C Hydrogra Cttee	phy	G Dahlmann, H Gaul and G Weichart	"Investigations of temperature, salinity, oxygen, pH, alkalinity and organic pollutants in the Baltic Sea during BOSEX 77".
C Hydrogra Cttee		D Schmidt and H Zehle	"Trace metals in Baltic Sea water during BOSEX 77".
C Hydrogra Cttee		E Andrulewicz, A Brzezińska and A Trzosińska	"Some aspects of the chemical composition of particulate matter in the Southern Baltic".
C Hydrogra Cttee		A Voipio and L Niemistö	"Sedimentological studies and their use in pollution research".
F Maricult Cttee	_	J E Stewart	"Special Meeting on Diseases of Commercially Important Marine Fish and Shellfish".
Maricult Cttee	:61 cure		"Working Group on the Pathology of Marine Organisms, Conwy, 3-7 April 1979". (E+F)
	a:7 al Oceanogr.	N P Morozov and S A Petukhov	"Trace elements in hydrobionts and biotope of the surface layer of sea water in the North Atlantic and the Mediterranean".
Marine M Cttee		General Secretary	"UNEP plan of action for marine mammals".
Marine M Cttee	[ammals	P J H Reijnders	"Organochlorine and heavy metal residues in harbour seals of Schleswig-Holstein plus Denmark, and the Netherlands in relation to the reproduction in both populations".

## F - MARICULTURE COMMITTEE

F:1		Administrative Report.
F:2		"Report of Study Group on Standardisation of Methodology in Fish Nutrition Research, Hamburg, 21-23 March 1979".
F:3		"List of publications in the field of the Mariculture Committee, 1978".
F:4	J Gropp, J Beck, H Koops and K Tiews	"Rape-seed, lupine and field beans in trout diets".
F:5	H Koops and H Kuhlmann	"Grading of eels by means of mesh wire boxes".
F:6	D Kuhlmann, W Nellen, P H Koske, J Lenz and U Witt	"Studies on the growth of 0-group plaice and plankton in artificial biocoenoses in outdoor tanks of 2 and 24 m <sup>3</sup> volumes".
F:7	J Lenz, R Queisser, W Nellen and U Witt	"Biochemical composition of Nannochloris in batch cultures compared to other phytoplankton algae".
F:8 Ref. Biol. Oceanogr.Cttee	W Nellen, P H Koske, J Lenz, D Kuhlmann, G Quantz and U Witt	"Problems of energy transfer in multiple marine aquaculture systems".
F:9 Ref. Shellfish Cttee	Th. Neudecker	"Condition index and morphometric data of oysters ( <u>Crassostrea gigas</u> ) from the German Baltic coast".
F:10 Ref. Anacat. Cttee	G Quantz W Nellen and J Lenz	"Tolerance limits of rainbow trout fry (S. gairdneri) to salinity Adaptation strategy, survival and growth".
F:11	U Witt, J Lenz, P Koske, D Kuhlmann and W Nellen	"Nannochloris spec. as a food organism in marine aquaculture. Culture techniques, production and consumption by secondary producers".
F:12	H Rosenthal, G Otte and G Krüner	"Long-term operation of a brackish water recycling system: progress report 1978".
F:13	A L Bakstansky et al.	"Studies on some characteristics and destiny of hatchery young Atlantic salmon".

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F:14	A Arias and E Pascual	"Pilot-scale production of sea bream (Sparus aurata L.) fry".
F:15 Ref. Marine Environmental Quality Cttee	J E Stewart	"Special Meeting on Diseases of Commercially Important Marine Fish and Shellfish".
F:16 Ref. Shellfish Cttee	D Latrouite et S Claude	"Essai de culture suspendue de coquilles St. Jacques, <u>Pecten maximus;</u> influence de la transplantation sur le développement gonadique".
F:17	B R Howell	"Rearing larval cod (Gadus morhua L.) on cultured foods".
F:18	C J Sindermann	"Epizootiological aspects of transfers and introductions of marine species".
F:19 Ref. Shellfish Cttee	M Comps	"Etude du cycle de <u>Marteilia</u> <u>refringens</u> dans l'étang de Thau".
F:20 Ref. Shellfish Cttee	J P Joly et M Comps	"Etude ultrastructurale d'une haplosporidae parasite de la palourde <u>Tapes</u> <u>decussatus</u> L.".
F:21	G Nævdal, R Lerøy and D Møller	"Variation in growth rate and age at first maturity in rainbow trout".
F:22	T Gjedrem and G Nævdal	"Research on quantitative genetics on salmonids in Norway".
F:23 Ref. Shellfish Cttee	J M Capuzzo	"The effect of low protein feeds on the bioenergetics of juvenile lobsters (Homarus americanus Milne-Edwards)".
F:24	M D Hanisak	"Cultivation and bioenergetics of the agarophyte, <u>Gracilaria</u> <u>tikvahiae</u> ".
F:25 Ref. Shellfish Cttee	R Mann	"Bioenergetics of marine bivalve molluscs: considerations for the design and operation of large-scale grow-out systems".
F:26	J H Ryther	"Mariculture in the People's Republic of China".
F:27	D M Bartley, J M Carlberg, J C van Olst and R F Ford	"Effects of temperature and feeding level on growth of the American lobster, Homarus americanus".
F:28	A L S Munro	"Introduction of Pacific salmon to Europe".

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F	:29	P Jensen, B Braaten and D Møller	"Rearing of cod fry in plastic pens".
F	:30	N E Buroker	"Overdominance of a muscle protein (MP-1) locus in the Japanese oyster, Crassostrea gigas (Ostreidae)".
	:31 Anacat.	F M Utter, D Campton, S Grant, G Milner, J Seeb and L Wishard	"Population structures of indigenous salmonid species of the Pacific Northwest: I. A within and between species examination of natural populations based on genetic variations of proteins".
F	<b>:</b> 32	J G Stanley	"Monosex and sterile fish for trans- plantation and aquaculture".
F	<b>:</b> 33	W K Hershberger	"The relationship of genetics work on the anadromous salmonids of the North Pacific to culture problems".
F	<b>:</b> 34 ·	H H Haskin	"Development of disease resistance in the American oyster, <u>Crassostrea virginica"</u> .
F	<b>:</b> 35	A Crosby Longwell	"Genetics and breeding in American aquaculture, current status, present views, recent and ongoing research".
F	<b>:</b> 36	J R Wall and S W Wall	"Population genetics of the bay scallop <u>Argopecten irradians</u> .  I. Geographic variation at <u>PGI</u> and <u>PGM-1</u> loci".
F	<b>:</b> 37	J E Lannan	"Broodstock management and selective breeding of Pacific oysters (Crassostrea gigas)".
	:38 Demersal Cttee	J B Shaklee and G S Whitt	"Biochemical genetic markers as a taxonomic tool: dichotomy of lactate dehydrogenase patterns in gadiform fishes reveals an unnatural grouping".
F	<b>:</b> 39	L J Lester	"Implications of population genetic data for the aquaculture of penaeid shrimp".
	:40 Demersal Cttee	D P Philipp, W F Childers and G S Whitt	"Genetic structure of largemouth bass (Micropterus salmoides, perciformes) populations in the United States: correlation of allelic isoenzyme phenotypes with specific thermal environments".

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. ·	F:41	T Banerjee	"Toward a partnership among ICES member countries for the development of mariculture programs".
	F:42	E Losee	"Experimental examination of selection for commercial traits in the oyster, Crassostrea virginica".
	F:43	S Stiles	"Experimental inbreeding and hybridization in the commercial American oyster".
	F:44 Ref. Shellfish Cttee	R W Menzel	"Genetic manipulations of bivalve molluscs for mariculture".
	F:45 Ref. Anacat. Cttee	S R Zell	"Preservation of rainbow trout and Atlantic salmon gametes".
E Constitution	F:46	G Gall	"Genetic of fish: what do we know and what do we not known?".
	F:47	J A West	"The role of genetics in commercial cultivation of seaweeds".
	F:48	S R Malecha, J B Peebles and D Sarver	"Approaches to the study of domestication in aquaculture: the development and characterization of genetic stocks and their hybrids in the cultured freshwater prawn, <u>Macrobrachium rosenbergii</u> ".
	F:49	F K Hoornbeek	"Chromosome manipulation in the breeding of smooth and winter flounders".
A Segretary	<b>F:</b> 50	M Borlaug	"Mariculture and genetics from the vantage point of successful plant breeding programs".
	F:51	Y Harache et G Boeuf	"Reproduction en captivité du saumon coho ( <u>Oncorhynchus</u> <u>kisutch</u> )".
	F:52	V Oiestad and E Moksness	"Interaction between Atlanto-Scandian herring larvae (Clupea harengus L.) and capelin larvae (Mallotus villosus) in a concrete enclosure experiment".
	F:53	E Moksness and V Oiestad	"Growth and survival experiment with capelin larvae (Mallotus villosus) in a basin and in plastic bags".
	F:54	State Univ. of Ghent (Belgium)	"Progress report on the research activities of the laboratory for mariculture".

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F:55	Joan R Mitchell	"A report on the advisability and terms of reference for a Working Group on policy issues related to mariculture".
F:56	G F Newkirk, R W Doyle and L E Haley	"The role of genetics in mariculture".
F:57	G F Newkirk	"Selection for faster growth in the European flat oyster, Ostrea edulis".
F:58	R W Doyle	"Rapid heritable changes in the biology of a malacostracan crustacean selected for improved yield in a model aquaculture program: genetic basis and economic implication".
F:59	S Euteneuer and H Rosenthal	"Effects of cryoprotective agents on embryonic development of herring eggs".
F:60	General Secretary	"Future tasks of the Mariculture Committee".
F:61 Ref. Marine Environmental Quality Cttee		"Groupe de Travail sur la Pathologie des organismes marins, Conwy, avril 1979".
dartion 000ee		"Working Group on the Pathology of Marine Organisms, Conwy, April 1979".

## Reference Papers to the Mariculture Committee

E:22 Marine Environmental Quality Cttee		"Report of the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April 1979".
E:24 Marine Environmental Quality Cttee	R Murchelano and T Azarowitz	"Fish disease survey in the western North Atlantic".
E:25 Marine Environmental Quality Cttee	R Murchelano and J Ziskowski	"Fin rot disease - a sentinel of environmental stress?".
E:31 Marine Environmental Quality Cttee	C M Morrison, R G Appy, G Shum, C Annand and P H Odense	"Histology and the incidence of pseudobranch tumours in Atlantic cod (Gadus morhua) in Halifax harbour".

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# Reference papers

	E:32 Marine Environmental Qualite Cttee	M Gutierrez	"On the staining of capsules and filaments of Myxobolus sp. and Kudoa sp. parasite protozoa on certain marine fishes".
	G:39 Demersal Fish Cttee	C M Morrison and G Shum	"Microsporidian parasites in the gills of brook trout (Salvelinus fontinalis) from fresh water; and Atlantic cod (Gadus morhua)".
	K:20 Shellfish Cttee	R Boddeke and M Kat	"Differences in food preference of penaeid shrimp species".
)	K:23 Shellfish Cttee	G Tige, H Grizel, A Langlade et M A Rabouin	"Compléments d'observations sur le cycle du parasite <u>Marteilia refringens</u> (Grizel et coll., 1974)".
	K:45 Shellfish Cttee	Y Morizur	"Evaluation de la perte d'oeufs lors de l'incubation chez <u>Nephrops</u> <u>norvegicus</u> dans la région sud Bretagne".
	M:2 Anacat. Cttee	S Knutsson	"Factors affecting the parr-smolt transformation in Atlantic salmon".
	M:23 Anacat. Cttee	B D Glebe, R G Appy and R L Saunders	"Variation in Atlantic salmon reproductive traits and their implications in breeding programs".
	M:29 Anacat. Cttee	Y Harache et G Boeuf	"Variations saisonnières de la tolérance à l'eau de mer de juvéniles de saumon coho (Oncorhynchus kisutch)".

## G - DEMERSAL FISH COMMITTEE

G:1		Administrative Report.
G:2		"Report of an <u>ad hoc</u> Working Group on the Norway Pout Box Problem, Charlottenlund, 29 January - 2 February 1979".
G:3		"Report of the ICES O-Group Flatfish Working Group, Charlottenlund, 19-21 February 1979".
G:4		"Publications relative to the interest of the Demersal Fish Committee".
G:5		"Report of the Working Group on Fish Stocks at the Faroes, Charlottenlund, 30 April - 2 May 1979".
G:6		"Report of the Saithe (Coalfish) Working Group, Charlottenlund, 25-28 April 1979".
G:7		"Report of the North Sea Roundfish Working Group, Charlottenlund, 7-11 May, 1979".
G:8		"Report of the Working Group on Greenland Halibut in Region 1, Charlottenlund, 7-10 May 1979".
G:9 Ref. Pelagic Fish Cttee		"Report of the Working Group on Division IIIa Stocks, Charlottenlund, 2-9 April 1979".
G:10		"Report of the North Sea Flatfish Working Group, Charlottenlund, 14-18 May 1979".
G:10/Addendum	1	"Errata to North Sea Flatfish Working Group's Report".
G:11	G Freytag	"Age determinations in <u>Notothenia</u> <u>rossii</u> <u>marmorata</u> ".
G:12	W Weber	"On the turbot stock in the North Sea".
G:13 ) G:14 ) G:15 )		Withdrawn.
G:16	I V Borkin	"Distribution and length composition of the Polar cod larvae in the Barents Sea".
G:17	I Ya. Ponomarenko and N A Yaragina	"Seasonal and year-to-year variations in the feeding of the Barents Sea cod on Euphausiacea in 1947-77".

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	G:18	A I Mukhin	"Distribution of the demersal fishes in the southern Barents Sea depending on the heat content of water masses".
	G:19	M A Sonina	"Growth rate and maturation of the Arcto-Norwegian haddock Melanogrammus aeglefinus (Linné)".
	G:20		"Report of the Arctic Fisheries Working Group, Charlottenlund, 28 May - 1 June, 1979".
	G:21	R G Houghton and R C A Bannister	"Assessment and management of the North Sea sole stock".
og stålende,	G:22 Ref. Pelagic and Baltic Fish Cttees	R G Houghton	"Density-dependent growth in demersal fish".
- Land	G:23		"Report of the Irish Sea and Bristol Channel Working Group, Charlottenlund, 6-14 June 1979".
	G:24 Ref. Pelagic Fish Cttee	D Pauly and G Gaschütz	"A simple method for fitting oscillating length growth data, with a program for pocket calculators".
	G:25		"Report of the Working Group on Redfish in Region 1, Charlottenlund, 21-26 May, 1979".
	G:26		"Report of the Working Group on Norway Pout and Sandeels in the North Sea, Charlottenlund, 23-25 April 1979".
	G:27		"Report of the Working Group on Assessment of the Hake Stocks, Charlottenlund, 28-31 May 1979".
	G:28	S Grimm and M Baranowski	"Distribution and abundance of redfish larvae of Flemish Cap in April 1978".
	G:29		Withdrawn.
	G:30	P Beillois, Y Desaunay, D Dorel et M Lemoine	"Etude des nurseries littorales de la baie du Mont St. Michel et du Cotentin".
	G:31	P Geistdoerfer	"Alimentation du grenadier, <u>Coryphaenoides</u> <u>rupestris</u> dans l'Atlantique nord-est".

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G:32	J Kopp	"Etudes des variations saisonnières de la structure démographique des Ammodytidae du genre Hyperoplus de la baie de Seine occidentale".
G:33	J G Shepherd, D H Cushing, J G Pope and J W Horwood	"A new relationship between recruitment and parent stock".
G:34	C T Macer, B W Jones and R C A Bannister	"Factors affecting the accuracy of catch predictions in some demersal fish stocks".
G:35		"Report of the International Gadoid Survey Working Group".
G:36	N Daan, J R G Hislop, M J Holden, J Lahn-Johannessen and W G Parnell	"Report of the Pelagic O-Group Gadoid Survey in the North Sea in 1978".
G:37		Withdrawn.
G:38	J E Bodammer	"An introductory light and electron microscopic study of the olfactory epithelium in striped bass (Morone saxatilis) and winter flounder (Pseudopleuronectes americanus) larvae".
G:39 Ref. Mariculture Cttee	C M Morrison and G Shum	"Microsporidian parasites in the gills of brook trout (Salvelinus fontinalis) from fresh water; and Atlantic cod (Gadus morhua)".
G:40 Ref. Marine Mammals Cttee	P H Odense	"Phocanema decipiens, the codworm problem and solutions".
G:41 Ref. Pelagic Fish Cttee	P Sparre	"Some remarks on the application of yield/recruit curves in estimation of maximum sustainable yield".
G:42	F Lagardère	"Utilisation de l'activation pour l'étude systématique des oeufs de Soleidae (zones VIIIb3 et VIIIb5)".
G:43		Withdrawn.
G:44	V M Nikolaev	"Cod stocks in 1978 - Introduction to 'Annales Biologiques', Vol. 35 (for 1978)".

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G:45	R Jones	"Relationship between mean length and year class strength in North Sea haddock".
G:46	J W Smith and R Wotten	"Recent surveys of larval Anisakis nematodes in gadoids from Scottish waters".
G:47 Ref. Biol. Oceanogr. Cttee	W Smith, M Pennington, P Berrien and J Sibunka	"Seasonal changes in distribution and abundance of cod and haddock larvae in western North Atlantic, 1974-78".
G:48	A H McVicar	"Ichthyophonus in haddock and plaice in Scottish waters".
G:49 Ref. Pelagic Fish Cttee		"Report of the International O-Group Survey in Faroe Waters, 1979".
G:50	0 Nakken and C J Rørvik	"Distribution and abundance of 0-group Norway pout and haddock in the North Sea July-August 1978".
G:51 Ref. Fishing Technology Cttee	J Dalen and O M Smedstad	"Acoustic method for estimating absolute abundance of young cod and haddock in the Barents Sea".
G:52 Ref. Pelagic Fish Cttee	T Helgason and H Gislason	"VPA-analysis with species interaction due to predation".
G:53 Ref. Pelagic, Baltic and Shellfish Cttees	W G Doubleday	"A sensitivity analysis of selected catch projections".
G:54	R W Langton	"Food of yellowtail flounder, <u>Limanda</u> <u>ferruginea</u> (Storer)".
G:55	R K Mayo, E Bevacqua, V M Gifford and M E Griffin	"An assessment of the Gulf of Maine redfish, Sebastes marinus (L.), stock in 1978".
G:56	Ø Ulltang	"Some comments to the programme of adjusting TACs to mesh size changes".
G:57	M H Barahona- Fernandez and M T Diniz	"Weaning and pre-growth of the Dover sole (Solea solea L.)".
G:58	J A Gulland	"Long-term potential rewards from management of fish resources in the North Atlantic".

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G:59

K Kosswig

"A note on the age and growth of the roughhead grenadier (Macrourus berglax Lacépède) at East Greenland (Dohrn Bank) in 1978".

#### Reference papers to the Demersal Fish Committee

B:11 Fishing Technology Cttee	D J Garrod	"Fishing performance in the UK fleet 1974-77".
B:13 Fishing Technology Cttee	R Guichet	"Sélectivité des poches en polyamides dans la pêche de la sole (Golfe de Gascogne, 1979)".
B:19 Fishing Technology Cttee	K K Angelsen, K Haugen and S Floen	"The catching efficiency of cod gillnets with different hanging ratio (E) and different floating buoyancy".
B:21 Fishing Technology Cttee	A Fernø and J W Valdemarsen	"Preliminary studies on the influence of bottom obstructions and topography on the availability of demersal fish for gillnet fishing in the North Sea".
B:22 Fishing Technology Cttee	I Huse	"Fish behaviour studies as an aid to cod and haddock longline hook design".
E:13 Marine Environmental Quality Cttee	H Möller	"Review of the geographical distribution of fish diseases in the Northeast Atlantic".
E:54 Marine Environmental Quality Cttee	G Conan and M Friha	"Impact of the 'Amoco Cadiz' oil spill on the growth of soles and plaice in the 'Aber' estuaries of Northern Brittany".
F:38 Mariculture Cttee	J B Shaklee and G S Whitt	"Biochemical genetic markers as a taxonomic tool: dichotomy of lactate dehydrogenase patterns in gadiform fishes reveals an unnatural grouping".

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# Reference papers

F:40 Mariculture Cttee	D P Philipp, W F Childers and G S Whitt	"Genetic structure of largemouth bass ( <u>Micropterus salmoides</u> , perciformes) populations in the United States: correlation of allelic isoenzyme phenotypes with specific thermal environments".
H:16 Pelagic Fish Cttee	J G Pope	"A modified cohort analysis in which constant natural mortality is replaced by estimates of predation levels".
H:31 Pelagic Fish Cttee		"Report on the O-Group Fish Survey in Icelandic and East-Greenland Waters, August-September 1979".
H:34 Pelagic Fish Cttee	I-hsun Ni	"Comparative fish population dynamics - a feasibility study".
H:59 Pelagic Fish Cttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1979".
H:61 Pelagic Fish Cttee		"Report of the Norwegian-EEC Joint Scientific Sub-Group on the Distribution of Shared Fish Stocks in the North Sea; 12-15 June 1979, Bergen".
J:8 Baltic Fish Cttee	0 Bagge	"The relationship between the size of predator and the size of prey in cod".
K:33 Shellfish Cttee	J A M Kinnear and K Livingstone	"Observations on the feeding of young cod Gadus morhua L. on Nephrops norvegicus (L.) in the Firth of Forth".
K:43 Shellfish Cttee	G Conan and M Friha	"Long-term impact of a change in mesh size from 50 to 70 mm on the yield in weight and fecundity per recruit for
er en		Norway lobster populations. Is there a simple solution to a complex problem: a simulation model".
L:28 Biol. Oceanogr.Cttee	E Fridgeirsson	"Notes on capelin and sandeel larvae collected in Icelandic waters 1976-79".

#### H - PELAGIC FISH COMMITTEE

H:1		Administrative Report.
H:2		"Report of the Blue Whiting Planning Group, Lowestoft, 12-16 March 1979".
Н:3	Edited 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 1978".
Н∶4		"Report of the Working Group on Herring Larval Surveys South of 62°N, Char-lottenlund, 26 and 27 April, 1979".
Н:5		"Report of the Mackerel Working Group, 23-27 April 1979, Charlottenlund".
н:6		"Report of the Herring Assessment Working Group for the Area South of 62°N, Charlottenlund, 30 April - 5 May, 1979".
H:7	S Hjalti í Jákupsstovu	"On the formation of the first winter zone in blue whiting otoliths".
H:8		"Report of the Working Group on Atlanto- Scandian Herring, Bergen, 21-23 May 1979".
H:9	R Schöne	"Further biological investigations on blue whiting in the Northeast Atlantic during August-December 1978".
H:10	R Schöne	"Distribution of blue whiting in the waters around Faroes and west of Great Britain and Ireland in February-March 1979".
H:11		Withdrawn.
H:12 Ref. Biol. Oceanography Cttee	L Domanevsky, E Margolinsky and A Sigaev	"Water circulation, ichthyomass and dolphin distribution in the southern coastal sub-area 34.3 of the central-east Atlantic area 34 (FAO breakdown)".
н:13	L A Duskina et al.	"Raising the effectiveness of reproduction of Pacific herring ( <u>Clupea pallasi</u> Val.) with artificial spawning grounds".
н:14	E I Seliverstova	"Length/age composition and distribution of Atlanto-Scandian herring in the Barents Sea in 1970-78".
н:15	M Gomez- Larrañeta	"Some remarks about generation curves and fishing mortality".

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H:16 Ref. Demersal and Baltic Fish Cttees	J G Pope	"A modified cohort analysis in which constant natural mortality is replaced by estimates of predation levels".
H:17	H Vilhjálmsson and P Reynisson	"Abundance estimates of the 1979 spawning stock of the Icelandic capelin".
H:18	K Kosswig and R Schöne	"Note on Blue Whiting distribution and spawning southwest of Iceland in spring 1979".
H:19	R J Wood	"The otolith as an aid in distinguishing populations of Atlantic herring (Clupea harengus L.)".
H:20	M Giedz	"Polish investigations on blue whiting taken in the region of the Celtic Shelf and Faroe Islands in the 1st half of 1979".
H:21	J Horbowy	"Estimation of instantaneous natural mortality coefficient as function of age for the mackerel".
H:22	B Hansen, S H í Jákupsstovu and B Thomsen	"Quantitative distribution of blue whiting in relation to the hydrography in Faroese waters March-May 1979".
Н:23	P 0 Johnson	"The results of echo-integrator surveys for sprat carried out in the coastal waters of north-east England (Farne-Wash) in February 1978 and 1979".
Н:24	W A Dawson	"The maximum sustainable yield of the western mackerel stock, as estimated from catch per unit of effort".
H:25	A Corten	"Report on the ICES Young Fish Survey 1979: herring data".
н:26	A Corten and G van de Kamp	"Abundance of herring larvae in the Dutch Wadden Sea as a possible indication of recruitment strength".
H:27	E Fridgeirsson	"Natural mortality of the Icelandic capelin".
H:28	P Fossum and A Johannessen	"Field and laboratory studies of herring larvae (Clupea harengus L.)".
Н:29		"Rapport de la Réunion Portugaise- Espagnole, Lisbonne, mai 1979: Quelques aspects de la biologie de <u>Sardina</u> <u>pilchardus</u> (Walb.) des côtes portugaises et galiciennes et état des 'stocks' de cette espèce pour les divisions VIII et IXa du CIEM".

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H:30		"Bibliography of papers published by members of the Pelagic Fish Committee in 1978 or relevant to the interest of that Committee".
H:31 Ref. Demersal Fish Cttee		"Report on the O-Group Fish Survey in Icelandic and East-Greenland Waters, August-September 1979".
H:32	J Gjøsæter, I M Beck and T Monstad	"Primary growth rings in blue whiting otoliths".
Н:33	T Monstad	"Preliminary results of Norwegian blue whiting survey northwest of Scotland in April 1979".
H:34 Ref. Demersal and Baltic Fish Cttees	I-hsun Ni	"Comparative fish population dynamics - a feasibility study".
Н:35	V M Nikolaev	"Herring stocks in 1978 - Introduction to 'Annales Biologiques', Vol. 35 (for 1978)".
н:36	O Hagström	"Observations on the abundance of I-group sprat in the Skagerrak-Kattegat in the first quarter of the years 1972-79".
Н:37	D W McKay	"The distribution and abundance of herring larvae to the west of Scotland in 1978".
H:38 Ref. Biol. Oceanography Cttee	D W McKay	"Report on the International Surveys of Herring Larvae in the North Sea and Adjacent Waters in 1978/79".
Н:39	J P F Wilson	"Length and age composition and back- calculated growth rates of sprats in Scottish waters".
H:40	J I Edwards, J P F Wilson and R S Bailey	"An echo integrator survey for sprats in UK coastal waters from the Tyne to the Moray Firth, February 1979".
H:41 Ref. Biol. Oceanography Cttee	S H Coombs	"An estimate of the size of the spawning stock of blue whiting (Micromesistius poutassou) based on egg and larval data".
H:42 Ref. Hydrography Cttee	Jens Smed	"Bottom temperature and salinity in the North Sea during the ICES Young Herring Survey in February and March 1979".

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Н:43	R Rosenberg	"Herring stocks in the Skagerrak and the Kattegat during the 1970s".
H:44		"A preliminary report on the ICES coordinated acoustic survey of herring stocks in 1979".
H:45	M Walsh and P Rankine	"Observations on the diet of mackerel in the North Sea and to the west of Britain".
н:46	R S Bailey	"Aspects of the life history of sprats in the northwestern North Sea".
Н:47	J P Molloy	"Fecundities of Celtic Sea autumn/winter spawning herring".
H:48 Ref. Biol. Oceanography Cttee	R J R Grainger	"The distribution and abundance of herring larvae to the south of Ireland in 1978/79".
H:49	F G Carey and J Teal	"Some observations on visceral temperatures of lamnid sharks.
н:50	F G Carey	"The activities of free-swimming mako sharks".
H:51	N A Nielsen	"Prediction of spawning stock and yield using a stochastic model for stock recruitment".
Н:52	J Bravo de-Laguna, M A R Fernandez, R Goni and A Delgado	"Growth studies of <u>Sardina pilchardus</u> (Walb.) done by direct methods and scalimetry off West Africa".
н:53	M Walsh	"Adolescent mackerel in the North Sea International Young Herring Surveys of 1977-79".
Н:54	J Gauld	"Reproduction and fecundity of the Scottish-Norwegian stock of spurdogs Squalus acanthias (L.)".
H:55 Ref. Biol. Oceanography Cttee	A G Durbin and E G Durbin	"The biology of a filter-feeding planktivore: the Atlantic Menhaden, Brevoortia tyrannus, in Narragansett Bay, Rhode Island, USA".
<b>H</b> •56	M P Sissenwine and G T Waring	"Analysis of sea herring fisheries of the northwest Atlantic from Cape Hatteras to southwest Nova Scotia".
Н•57	R C Hennemuth, G P Patil, J Palmer and B E Brown	"Recruitment probability density functions".

#### Pelagic Fish Committee (ctd)

H:58

Withdrawn.

H:59
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 1979".

H:60

E Ellingsen

"The abundance of sprat eggs and larvae in the Langesund and Oslofjord areas, Southeastern Norway, 1974-78".

H:61 Ref. Demersal Fish Cttee "Report of the Norwegian-EEC Joint Scientific Sub-Group on the Distribution of Shared Fish Stocks in the North Sea, 12-15 June 1979, Bergen".

H:62 H Schultz and S Holzlöhner

"G.D.R. spring surveys on blue whiting"

H:63 K Warburton, J R Hutcheon and S T Forbes

"The distribution and abundance of blue whiting <u>Micromesistius poutassou</u> (Risso) at Faroe and to the west of Scotland in 1979 with comments on the composition of the post spawning stock".

,

H:64 J A Morrison

"0-group herring surveys on the west coast of Scotland, 1975-78".

#### Reference Papers to the Pelagic Fish Committee

"The role of schooling in fish capture" T J Pitcher B:5 Fishing Technology Cttee B:6 "Full scale trials with long-rope trawls". K Lange Fishing Technology Cttee D J Garrod "Fishing performance in the UK fleet B:11 1974-77". Fishing Technology Cttee

B:16 Fishing Technology Cttee S H í Jákupsstovu

"Faroese experiments with very big meshed trawls for blue whiting fishery".

# Pelagic Fish Committee (ctd)

### Reference papers

Fish Cttee

mererence papers		
B:18 Fishing Technology Cttee	K Olsen	"Observed avoidance behaviour of herring in relation to passage of an echo survey vessel".
B:23 Fishing Technology Cttee	B Isaksen	"Estimates of capelin trawl efficiency by comparing the available fish with the actual catch".
B:24 Fishing Technology Cttee	B Isaksen, H Jensen and S Olsen	"Recent developments on blue whiting trawls in Norway".
C:21 Hydrography Cttee	E Hagen and R Weiss	"Mesoscale coastal upwelling dynamics off the NW-African coast and hypothetic relations to the chub mackerel concentrations".
E:5 Marine Environmental Quality Cttee	S J de Groot	"The consequence of marine gravel extraction for the spawning of herring"
E:13 Marine Environmental Quality Cttee	H Möller	"Review of the geographical distribution of fish diseases in the Northeast Atlantic".
E:26 Marine Environmental Quality Cttee	M W Newman, E B Stephens and F M Hetrick	"Etiology of 'Spinning disease' of Menhaden".
G:9 Demersal Fish Cttee		"Report of the Working Group on Division IIIa Stocks, Charlottenlund, 2-9 April 1979".
G:22 Demersal Fish Cttee	R G Houghton	"Density-dependent growth in demersal fish".
G:24 Demersal Fish Cttee	D Pauly and G Gaschütz	"A simple method for fitting oscillating length growth data, with a program for pocket calculators".
G:41 Demersal Fish Cttee	P Sparre	"Some remarks on the application of yield/recruit curves in estimation of maximum sustainable yield".
G:49 Demersal Fish Cttee		"Report of the International O-Group Survey in Faroe Waters, 1979".
G:52 Demersal Figh Cttoe	T Helgason and H Gislason	"VPA-analysis with species interaction due to predation".

# Pelagic Fish Committee (ctd)

# Reference papers

G:53 Demersal Fish Cttee	W G Doubleday	"A sensitivity analysis of selected catch projections".
G:58 Demersal Fish Cttee	J A Gulland	"Long-term potential rewards from management of fish resources in the North Atlantic".
J:9 Baltic Fish Cttee	A Lindquist	"Sprat (Sprattus sprattus) in the Baltic and the Skagerrak/Kattegat: stock sizes calculated from VPA, egg surveys and echo integrations".
J:18 Baltic Fish Cttee	V Sjöblom and R Parmanne	"Abundance of sprat off the coast of Finland in 1956-68 and 1975-78 according to exploratory fishing with a pelagic trawl".
L:23 Biological Oceanography Cttee	E Houde and S Berkeley	"Juvenile Pacific herring Clupea harengus pallasi feeding in CEPEX enclosures".
L:28 Biological Oceanography Cttee	E Fridgeirsson	"Notes on capelin and sandeel larvae collected in Icelandic waters 1976-79".

### J - BALTIC FISH COMMITTEE

		·
J:1		Administrative Report.
J:2		"Publications of interest to the Baltic Fish Committee, 1978".
J:3		"Report of the Working Group on Assessment of Pelagic Stocks in the Baltic, Charlottenlund, 21-30 May 1979".
J:4		"Report of the Working Group on Assessment of Demersal Stocks in the Baltic, Charlottenlund, 21-26 May 1979".
J <b>:</b> 5	G Kühlmorgen-Hille	"Infestation rate of herring in the western Baltic Sea with Anisakis spp."
J:6	L Rannak and M Simm	"Dependance of abundance of the Gulf of Riga spring herring year classes on the supply of larval food".
J:7	O Bagge	"Danish discards of cod in the Baltic".
J:8 Ref. Demersal Fish Cttee	O Bagge	"The relationship between the size of predator and the size of prey in cod".
J:9 Ref. Pelagic Fish Cttee	A Lindquist	"Sprat (Sprattus sprattus) in the Baltic and the Skagerrak/Kattegat: stock sizes calculated from VPA, egg surveys and echo integrations".
J:10	M Kosior and K Strzyzewska	"Fecundity of Baltic cod".
J:11	M Kosior and K Strzyzewska	"Fecundity of Baltic herring".
J:12	M Kosior and K Strzyzewska	"Stock recruitment relationship in Baltic cod and herring".
J:13	M Kosior	"Relation between total length and the length measured from the lst ray of the dorsal fin to the end of tail fin of Baltic cod".
J:14	J Elwertowski and J Netzel	"A second attempt to evaluate the maximum sustainable yield (MSY) in the Baltic cod fishery".
J:15	J Elwertowski	"Development of the sprat resources in the Southern Baltic".
J:16	J Netzel	"Polish investigations on juvenile cod in the Gulf of Gdańsk in 1962-79".

# Baltic Fish Committee (ctd)

J:17	B Draganik and Zb. Reimann	"Flounder, plaice and turbot fished along the Polish coast in 1978".
J:18 Ref. Pelagic Fish Cttee	V Sjöblom and R Parmanne	"Abundance of sprat off the coast of Finland in 1956-68 and 1975-78 according to exploratory fishing with a pelagic trawl".
J:19	V Sjöblom and R Parmanne	"The year class strength of spring spawning Baltic herring estimated from abundance of larvae in the seas around Finland in 1974-79".
J:20	V Sjöblom and R Parmanne	"Abundance of sprat eggs and larvae in the northern Baltic in 1978".
J:21	V Sjöblom and R Parmanne	"Abundance of Baltic herring off the coast of Finland in 1956-68 and 1975-78 according to exploratory fishing with a pelagic trawl".
J:22	M-B Axell	"Feeding of cod in the Aland Sea and its influence on the stocks of herring and sprat".
J <b>:</b> 23	H Lassen	"An assessment of the Baltic sprat stock in Sub-divisions 26 and 28 for 1970-78, taking changes in the cod stock into account".
J:24	K Krenkel and R Hinrichs	"Further investigations on the amount and distribution of eggs and larvae of sprat (Sprattus sprattus L.) and cod (Gadus morhua L.) in the Baltic Sea in 1978".
J <b>:</b> 25	C C Friess and R Oeberst	"Investigation on fecundity of the Rügen spring spawning herring in 1976-78".
J <b>:</b> 26	H Borrmann and M Berner	"An attempt to estimate the optimum fishing mortality rate for Baltic cod".
J <b>:</b> 27	O Rechlin and B Groth	"Fluctuations of year class strength and changes in weight growth of the sprat (Sprattus sprattus L.) of the Gotland Sea area".
J <b>:</b> 28	N Schulz and D Kästner	"Further investigations on young cod and herring in the Mecklenburg Bay, in the Arkona Basin and in the northern Bornholm Basin in November 1978 and January 1979".
J:29	N Jönsson and E Biester	"Results of tagging experiments on the Rügen spring herring 1977/78".

## Baltic Fish Committee (ctd)

J:30	N Brielmann and E Biester	"Investigations of the larvae of the spring herring at the spawning grounds around Rügen".
J <b>:</b> 31	E Biester	"The distribution of the Rügen spring herring".
J:32	E Biester, N Jönsson, P Hering, Th. Thieme, N Brielmann and D Lill	"Studies on Rügen herring 1979".

### Reference Papers to the Baltic Fish Committee

E:11 Marine Environmental Quality Cttee		Withdrawn.
G:22 Demersal Fish Cttee	R G Houghton	"Density-dependant growth in demersal fish".
G:53 Demersal Fish Cttee	W G Doubleday	"A sensitivity analysis of selected catch projections".
H:16 Pelagic Fish Cttee	J G Pope	"A modified cohort analysis in which constant natural mortality is replaced by estimates of predation levels".
H:34 Pelagic Fish Cttee	I-hsun Ni	"Comparative fish population dynamics - a feasibility study".

### K - SHELLFISH COMMITTEE

K:1	•	Administrative Report.
K:2		"Report of the Working Group on Assessment of Nephrops Stocks, Charlottenlund, 12-14 March 1979".
K: 3		"Report of the Working Group on Assessment of Cephalopod Stocks, Aberdeen, Scotland, 6-7 March 1979".
K:4		"Bibliography of publications relative to the interests of the ICES Shellfish Committee 1978".
K:5		"Report of the Working Group on Assessment of Pandalus Stocks, Lysekil, Sweden, 24-26 April 1979".
<b>K:</b> 6		"Report of the Working Group on Assessment of Scallop Stocks, Dublin, 4-6 April 1979".
K:7		"Report of the Working Group on Crangonid Shrimps, Hamburg, 2-4 May 1979".
K:8		"Report of the <u>Homarus</u> Working Group, Lowestoft, England, 21-24 May 1979".
K:9	R Meixner	"Assessment of wild <u>Mytilus</u> stocks in the Flensburg fjord (western Baltic)".
K:10	K Tiews and A Schumacher	"Assessment of brown shrimp stocks (Crangon crangon L.) off the German coast".
K:11	R N Burukowsky, A V Gaevskaya, L N Domanevski, Ch. M Nigmatulin and B G Panfilov	"Main results of research on squids carried out by the AtlantNIRO in the central-east Atlantic".
K:12	G P Ennis	"Size-maturity relationship and related observations in Newfoundland populations of the lobster (Homarus americanus)".
K:13	S R J Lovewell, A E Howard and D B Bennett	"The efficiency of parlour pots for catching crabs and lobsters".
K:14	E Edwards	"Preliminary results of an investigation on a new fishery for spider crabs (Maia squinado) along the south coast of England".

# Shellfish Committee (ctd)

K:15	G de Kergariou, D Latrouite, S Claude et D Perodou	"Extension de la crépidule ( <u>Crepidula fornicata</u> ) en Manche orientale".
K:16	G Tige, E His et M A Rabouin	"L'évolution de la maladie de la glande digestive de l'huître plate dans le bassin d'Arcachon et ses conséquences actuelles".
K:17 Ref. Biol. Oceanography Cttee	M Feuillet, M Hera D Razet, F Gueguer et M F Abrioux	
K:18	J P Berthome, J M Deslous-Paoli et F Fernandez-Cas	"Comparaison de 3 index de qualité de l'huître creuse <u>Crassostrea</u> stro <u>gigas</u> ".
K:19	J P Berthome, D Razet et J Garnier	"Etude comparée de deux années de reproduction de l'huître creuse <u>Crassostrea gigas</u> dans le bassin de Marennes-Oléron: aspects hydrobiologiques".
K:20 Ref. Maricul Cttee	R Boddeke ture and M Kat	"Difference in food preference of penaeid shrimp species".
K:21	M P Gras, P Gras, M Cosnard et J Garnier	"Contribution à la mise en place de critères de qualité des huîtres creuses <u>Crassostrea gigas</u> affinées en claires".
<b>K:</b> 22	P Gras et M P Gras	"Elevages de bivalves à partir de naissain d'écloseries dans les claires du bassin de Marennes- Oléron".
K:23 Ref. Maricul Cttee	G Tige, H Grizel, ture A Langlade et M A Rabouin	"Compléments d'observations sur le cycle du parasite <u>Marteilia</u> refringens (Grizel et coll., 1974)".
K:24	H Grizel, A Langlade et J B Perodou	"Premiers essais d'une nouvelle technique de captage d'huîtres plates en baie de Quibéron".
<b>K</b> :25	T S Burns, S H Clark V C Anthony and R J Essig	"Review and assessment of the USA offshore lobster fishery".
K:26	S A Murawski and F M Serchuk	"Distribution, size composition and relative abundance of ocean quahog, Arctica islandica, populations off the Middle Atlantic coast of the United States".

Shellfish Committee	<u>e</u> (ctd)	
K:27	J A Posgay	"Depth as a factor affecting the growth rate of the sea scallop".
K:28	J W Ropes and L O'Brien	"A unique method of aging surf clams".
K:29 Ref. Fishing Technology Cttee	J B Perodou et R Pinget	"Observations sur la pêche de la seiche <u>Sepia officinalis</u> au casier en baie de Vilaine".
K:30 Ref. Fishing Technology Cttee	A Charuau	"Sélectivité des fonds de chaluts en polyéthylène dans la pêche de la langoustine".
K:31 Ref. Biol. Oceanography Cttee	C C E Hopkins	"Ecobiochemical studies on <u>Pandalus</u> borealis (Krøyer) from Balsfjord, northern Norway: preliminary results from a winter situation".
K:32	A Koronkiewicz	"Some species of Crustacea of Antarctic and New Zealand region caught in 1977 and 1978 by Polish research vessels".
K:33 Ref. Demersal Fish Cttee	J A M Kinnear and K Livingstone	"Observations on the feeding of young cod <u>Gadus morhua</u> L. on <u>Nephrops norvegicus</u> (L.) in the <u>Firth of Forth".</u>
K:34	P M J Shelton, R G J Shelton and P R Richards	"Eye development in relation to moult stage in the lobster Homarus gammarus (L.)".
<b>K:</b> 35	R G J Shelton, J A M Kinnear and K Livingstone	"A preliminary account of the feeding habits of the edible crab Cancer pagurus L. off NW Scotland".
<b>K:</b> 36	F G Howard	"Recent trends in the Scottish fishery for Loligo forbesi together with some notes on the biology of the species".
K:37	J Mason, A M Shanks, D I Fraser and R G J Shelton	"The Scottish fishery for the queen, Chlamys opercularis (L.)".
K:38	J P Hillis	"Catch, landings and discards in the Irish Nephrops fishery".
K:39		Withdrawn.
K:40	Y Morizur	"Utilisation de caractères sexuels sécondaires pour la détermination de la taille à maturité sexuelle de Nephrops norvegicus dans la région Sud-Bretagne".

#### Shellfish Committee (ctd)

K:41

Y Morizur

"Utilisation de critères fonctionnels (présence de spermatophores, maturation des ovaires) pour la détermination de la taille et l'âge à maturité sexuelle de Nephrops norvegicus dans la région Sud-Bretagne".

K:42

Y Morizur

"Evolution du taux de présence de spermatophores chez les femelles de Nephrops norvegicus (L.) et développement ovarien de juillet 1976 à octobre 1978 dans la région

Sud-Bretagne".

K:43 Ref. Demersal Fish Cttee

G Conan and M Friha "Long-term impact of a change in mesh size from 50 to 70 mm on yield in weight and fecundity per recruit for Norway lobster populations. Is there a simple solution to a complex problem: a simulation model".

K:44

K:45

Y Morizur

Withdrawn.

"Evaluation de la perte d'oeufs lors de l'incubation chez Nephrops norvegicus dans la région Sud-Bretagne".

#### Reference Papers to the Shellfish Committee

B:7 Fishing Technology H Mohr and G Rauck "First results of German experiments with a selective shrimp trawl".

B:14

Cttee

Fishing Technology Cttee

J Bertrand et J Kopp

"Principaux types d'engins fixes utilisés le long des côtes du Cotentin pour la capture des crustacés et des mollusques".

E:22 Marine Environmental Quality Cttee

"Report on the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April 1979".

### Shellfish Committee (ctd)

### Reference papers

F:44

G:53

Demersal Fish

Cttee

Mariculture Cttee

F:9 Mariculture	Cttee	Th. Neudecker	"Condition index and morphometric data of oysters ( <u>Crassostrea</u> gigas) from the German Baltic coast".
F:16 Mariculture		D Latrouite et S Claude	"Essai de culture suspendue de coquilles St. Jacques, <u>Pecten</u> maximus; influence de la transplantation sur le développement gonadique".
F:19 Mariculture		M Comps	"Etude du cycle de <u>Marteilia</u> refringens dans l'étang de Thau".
F:20 Mariculture	Cttee	J P Joly et M Comps	"Etude ultrastructurale d'une haplosporidae parasite de la palourde <u>Tapes</u> <u>decussatus</u> L.".
F:23 Mariculture		J M Capuzzo	"The effect of low protein feeds on the bioenergetics of juvenile lobsters (Homarus americanus Milne-Edwards)".
F:25 Mariculture		R Mann	"Bioenergetics of marine bivalve molluscs: considerations for the design and operation of large-scale grow-out systems".

"Genetic manipulations of bivalve

"A sensitivity analysis of selected catch projections".

molluscs for mariculture".

R W Menzel

W G Doubleday

# L - BIOLOGICAL OCEANOGRAPHY COMMITTEE

L:1		Administrative Report.
L:2		"Papers related to the interests of the Biological Oceanography Committee".
L:3	U Kils	"Aspects of physiological ecology of <u>Euphausia</u> <u>superba"</u> .
L:4	I Hempel and G Hempel	"Early life history stages of krill in Bransfield Strait and Weddell Sea".
L:5	J A Adams	"A proposal to print a FLEXCAT Catalogue in Cooperative Research Report".
<b>L:</b> 6		Withdrawn.
L:7 Ref. Marine Environmental Quality Cttee	N P Morozov and S A Petukhov	"Trace elements in hydrobionts and biotope of the surface layer of sea water in the North Atlantic and the Mediterranean".
L:8	S S Drobysheva	"Distribution of the Barents Sea euphausids (fam. Euphausiacea)".
L:9	C Heip, R Herman, G Bisschop, J C R Govaere, M Holvoet, D Van Damme, C Vanosmael, K R Willems and L A P de Coninck	"Benthic studies of the Southern Bight of the North Sea and its adjacent continental estuaries".
L:10		"Report of the Working Group on the Distribution of Larval Fish, Copenhagen, Denmark, 16 to 19 May 1978, and Woods Hole, Massachusetts USA, 6 April 1979".
L:11	T C Platt	"Draft Prospectus for the Symposium on Primary, Secondary and Fish Production in Selected Shelf Areas in the North Atlantic".
L:12	G Radach, E Maier-Reimer and U Brockmann	"Mathematical models as tools for investigating the flow of matter through the lower trophic levels of the marine ecosystem".
L:13	H Tambs-Lyche	"Introduction to the Plankton Chapter in Vol. 35 of 'Annales Biologiques'".

Biological	Oceanography	Committee	(ctd)

	8	
L:14	Z Witek	"Results of biological investigations during IV Polish marine Antarctic Expedition in summer 1978/79".
L:15	F Real and J G Braun	"Production studies in Antequera Bay: a comparison with oceanic waters".
L:16	S Roy and L Legendre	"DCMU-enhanced fluorescence and photosynthetic activity of phyto-plankton".
L:17	J L Bigot	"Identification des zoés de tourteau ( <u>Cancer pagurus</u> L.) et d'étrille ( <u>Macropipus puber</u> L.) - Comparaison avec d'autres zoés de morphologie très voisine".
L:18	M Alcaraz	"Coexistence of congeneric planktonic copepods: the Acartia complex in the Ria of Vigo (NW Spain)".
L:19	F Vives	"Sur les larves de crustacés décapodes des côtes de Viscaya (nord de l'Espagne) pendant 1976".
L:20	S Falk-Petersen and C C E Hopkins	"Biological and economic aspects of growth patterns and protein-lipid relationships in the northern krill species, <u>Thysanoessa inermis</u> (Krøyer)".
L:21	M Plinski	"Mathematical model of cyanophyta's invasion in Baltic estuaries".
L:22	F Fernández	"Some characteristics of the particle selection behaviour of the Nauplius larva of <u>Calanus</u> pacificus (Copepoda, Calanoida)".
L:23 Ref. Pelagic Fish Cttee	E Houde and S Berkeley	"Juvenile Pacific herring <u>Clupea</u> <u>harengus pallasi</u> feeding in CEPEX enclosures".
L:24	M Bossicart and J P Mommaerts	"A mathematical model of the population dynamics of the dominant copepod species in the Southern Bight of the North Sea, 1977/78".
L:25	J A Lindley	"Continuous plankton records: an increase in the abundance of euphausids in the eastern central North Sea".
L:26	P C Reid and T D Budd	"Plankton and environment in the North Sea within the period 1948-70".

#### Biological Oceanography Committee (ctd)

L:27	K Sherman, C Jones and J Kane	"Zooplankton of continental shelf nursery and feeding grounds of pelagic and demersal fish in the NW Atlantic".
L:28 Ref. Demersal and Pelagic Fish Cttees	E Fridgeirsson	"Notes on capelin and sandeel larvae collected in Icelandic waters 1976-79".
L:29	R Rosenberg	"Effect of oxygen deficiency on benthic macrofauna in fjords".
L:30	A B Andersin, J Lassig and H Sandler	"Recent changes in the occurrence of benthic macrofauna in the central Baltic proper".
L:31	M Parker	"Algal blooms on the coasts of Ireland: a summary of the Proceedings of a 'Seminar on Red Tides' held in Dublin, March 1979".
L:32	H Ackefors and O Lindahl	"Primary phytoplankton production in the Baltic proper, 1973-76, in relation to secondary zooplankton production".
L:33	G Joiris, G Billen, C Lancelot, J P Mommaerts, M H Daro, M Bossicart, G Gillain, A Bertels, J H Hecq and J Wijnant	"Dynamics of organic matter in three planktonic ecosystems of the southern North Sea".
L:34	G Gubsch	"Investigations on krill <u>Euphausia</u> superba Dana off South Orkneys and South Shetlands in 1979".
L:35	S J Hay and J R G Hislop	"The distribution and abundance of Scyphomedusae in the North Sea during the summer of 1978".
L:36 Ref. Hydrography Cttee	W R Wright and R G Lough	"The Georges Bank larval herring patch study of 1978: a preliminary report".

#### Reference Papers to the Biological Oceanography Committee

C:14 Hydrography Cttee B Szpiganowicz

"The content of biogenic elements and oxygen in the frontal zone of the Brazil and Falkland currents".

# Biological Oceanography Committee (ctd)

# Reference papers

C:24 Hydrography Cttee	D Nehring	"Relationships between salinity and increasing nutrient concentrations in the mixed winter surface layer of the Baltic from 1969-78".
C:25 Hydrography Cttee	D Nehring and A Wilde	"Investigations on the atmospheric transport of nutrients into the Baltic".
C:26 Hydrography Cttee	J W Ramster	"Some of the lessons learnt from JONSDAP '76 in the planning and organisation of large-scale, cooperative oceanographic exercises".
E:60 Marine Environmental Quality Cttee	J P Mommaerts, W Baeyens and G Decadt	"Synthesis of research on nutrients in the Southern Bight of the North Sea".
F:8 Mariculture Cttee	W Nellen, P Koske, J Lenz, D Kuhlmann, G Quantz and U Witt	"Problems of energy transfer in multiple marine aquaculture systems".
G:47 Demersal Fish Cttee	W Smith, M Pennington, P Berrien and J Sibunka	"Seasonal changes in distribution and abundance of cod and haddock larvae in western North Atlantic, 1974-78"
H:12 Pelagic Fish Cttee	L Domanevsky, E Margolinsky and A Sigaev	"Water circulation, ichthyomass and dolphin distribution in the southern coastal sub-area 34.3 of the central-east Atlantic area 34 (FAO breakdown)".
H:38 Pelagic Fish Cttee	D W McKay	"Report on the International Surveys of Herring Larvae in the North Sea and Adjacent Waters in 1978/79".
H:41 Pelagic Fish Cttee	S H Coombs	"An estimate of the size of the spawning stock of blue whiting (Micromesistius poutassou) based on egg and larval data".
H:48 Pelagic Fish Cttee	R J R Grainger	"The distribution and abundance of herring larvae to the south of Ireland in 1978/79".
H:55 Pelagic Fish Cttee	A G Durbin and E G Durbin	"The biology of a filter-feeding planktivore, the Atlantic Menhaden Brevoortia tyrannus, in Narragansett Bay, Rhode Island, USA".
H:59 Pelagic Fish Cttee		"Report on joint Soviet-Icelandic investigations on hydrobiological conditions in the Norwegian Sea and Icelandic waters in May-June 1979".

## Biological Oceanography Committee (ctd)

### Reference papers

K:17 Shellfish Cttee

M Feuillet, M Heral, D Razet,

F Gueguen et M F Abrioux

"Les substances dissoutes dans les eaux du bassin de Marennes-Oléron et dans les eaux interstitielles de ses parcs conchylicoles:

résultats préliminaires".

K:31 Shellfish Cttee C C E Hopkins

"Ecobiochemical studies on Pandalus borealis (Krøyer) from Balsfjord, northern Norway: preliminary results from a winter situation".

### M - ANADROMOUS AND CATADROMOUS FISH COMMITTEE

	M:1		Administrative Report.
•	M:1/Annex 1		Administrative Report for Poland.
Ref. Ma	M:2 ariculture	S Knutsson	"Factors affecting the parr-smolt transformation in Atlantic salmon".
	M:3		"Report of the Joint ICES/EIFAC Working Group on Stocks of Eels, Charlottenlund, 20-22 March 1979".
	M:4		"The 25th Meeting of the Baltic Salmon Working Group, Alvkarleby, Sweden, 2-3 April 1979".
	M:4/Appendix		(Corrections to M:4).
	M:5	P Ottestad	"On the fluctuations in the yield of the Norwegian salmon fishery".
	M:6	F-W Tesch, R Kracht, M Schoth, D G Smith and G Wegner	"Report on the Eel Expedition of FRV 'Anton Dohrn' and RK 'Friedrich Heincke' to the Sargasso Sea 1979".
	M:7		Withdrawn.
	M:8	K W Jensen	"Saltwater releases and saltwater adaptation of smolts of Atlantic salmon".
	M:9	K W Jensen	"Experimental drift-netting for salmon in Norway 1978".
	M:10		"Report of the Working Group on North Atlantic Salmon, Charlotten- lund 30 April - 3 May 1979".
	M:10/Addendum	1	(Amendments to C.M.1979/M:10 and addendum to the Appendix of the same document)
	M:11	R Sych	"Report by the Baltic Salmon Working Group on cooperative sea trout tagging".
	M:12	F Chrzan	"Feeding of salmon and sea trout and their food resources in the Baltic Sea".
	M:13	L P Hansen	"Net mark frequencies on Atlantic salmon, Salmo salar L., in Norwegian rivers and coastal areas 1978".

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	M:14	P-0 Larsson	"Experiments with Carlin-tags of different colours".
	M:15	T R Porter	"A review of factors affecting the rate of return of tagged Atlantic salmon smolt and effects of tagging".
	M:16	D G Reddin and R F Burfitt	"The stock composition of Atlantic salmon off West Greenland and in the Labrador Sea".
	M:17	D G Reddin	"Evidence of an underestimation of the proportion of North American origin Atlantic salmon caught in the commercial fisheries at West Greenland".
	M:18	D G Reddin	"Refinement of the estimation of North American and European origin salmon at West Greenland".
	M:19	D J Fairbairn	"Evidence for the underestimation of the proportion of North American salmon in West Greenland feeding aggregate".
	M:20	D G Reddin and R F Burfitt	"Length, weight, sex and age characteristics of Atlantic salmon (Salmo salar) of North American and European origin caught at West Greenland in 1978".
o Calabana.	M:21	J K Bailey and R L Saunders	"Preliminary report on releases and returns of two year classes of Atlantic salmon from various pure strains and strain crosses".
recond	M:22	R L Saunders	"Physiological and behavioural changes involved in salmonid smolting with particular reference to Atlantic salmon".
Ref Ctt	M:23 . Mariculture ee	B D Glebe, R G Appy and R L Saunders	"Variation in Atlantic salmon reproductive traits and their implication in breeding programs".
	M:24	R A Eisner and J A Ritter	"The Canadian Atlantic salmon (Salmo salar) smolt tag and its recovery system: a review".
	M:25	J A Ritter and T L Marshall	"A review of non-catch fishing mortality as it relates to Atlantic salmon (Salmo salar) fisheries".
	М.: 26	W G Doubleday, J A Ritter and K U Vickers	"Natural mortality rate estimates for North Atlantic salmon in the sea".

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M:27*	Ole Christensen	"Catches of Baltic salmon in 1976-78".
M:28	E Hoffmann, H Hansen and P M Christensen	"Changes in catch per effort unit and catch composition of silver eels in the southeastern Denmark, 1949-77".
M:29 Ref. Mariculture Cttee	Y Harache et G Boeuf	"Variations saisonnières de la tolérance à l'eau de mer de juvéniles de saumon coho ( <u>Oncorhynchus</u> <u>kisutch</u> )".
M:30	P Prouzet, Y Harache et B Jalabert	"Rapports des sexes dans les captures de saumon atlantique d'une rivière de Bretagne, France".
M:31	P Prouzet	"Compétition interspécifiques entre les juvéniles de truite fario (Salmo trutta) et de saumon atlantique (Salmo salar) dans un ruisseau pépinière".
M:32	T H Simpson and A F Youngson	"Changes in thyroidal status associated with the migrations of the Atlantic salmon (Salmo salar L.)".
M:33	D W Hay, T H Simpson and A F Youngson	"Nutritional status and the down- stream migration of juvenile Atlantic salmon <u>Salmo</u> <u>salar</u> L.".
M:34	R J G Buck and A F Youngson	"The downstream migration of precociously mature Atlantic salmon (Salmo salar L.) parr in autumn".
M:35	Sv. Aa. Horsted and I Meldal	"Progress report on checking the lists of tagged salmon recaptured in Greenland waters".

#### Reference Papers to the Anadromous and Catadromous Fish Committee

C:5 G Wegner Hydrography Cttee

"First hydrographic results from the Sargasso Sea Expedition with FRV 'Anton Dohrn', 19.3. - 9.5.1979".

E:22 Marine Environmental Quality Cttee "Report on the Working Group on the Introduction of Non-Indigenous Marine Organisms, Conwy, 1-3 April 1979".

<sup>\*</sup> For the relevant Committee only.

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# Reference papers

F:10 Mariculture Cttee	G Quantz, W Nellen and J Lenz	"Tolerance limits of rainbow trout fry ( <u>S. gairdneri</u> ) to salinity Adaptation strategy, survival and growth".
F:31 Mariculture Cttee	F M Utter, D Campton, S Grant, G Milner, J Seeb and L Wishard	"Population structures of indigenous salmonid species of the Pacific northwest".
F:45 Mariculture Cttee	S R Zell	"Preservation of rainbow trout and Atlantic salmon gametes!
N:9 Marine Mammals	E C E Potter and A Swain	"Seal predation in the North-East England coastal salmon fishery".

### N - MARINE MAMMALS COMMITTEE

N:1		Administrative Report.
N:2	J C Rey and O Cendrero	"Les cétacés vus en mer et échoués sur les côtes espagnoles en 1977 et 1978".
N:3	S Söderberg	"An ecosystem approach to grey seals and fisheries".
N:4		"List of publications on marine mammals, 1978".
N:5		"ICES <u>ad hoc</u> Working Group on Interaction between Grey Seal Populations and Fish Species, Charlottenlund, 14-18 May 1979".
N:6	H E Drescher	"Spatial distribution of the harbour seal in the Waddensea during the breeding season".
N : 7	R Duguy	"Rapport annuel sur les cétacés et pinnipèdes trouvés sur les côtes de France en 1978".
N : 8	R Duguy et A Collet	"Note sur la reproduction de <u>Delphinus delphis</u> dans le NE Atlantique".
N:9 Ref. Anacat. Cttee	E C E Potter and A Swain	"Seal predation in the North-East England coastal salmon fishery".
N:10	D Prieur et R Duguy	"Nouvelles données sur le statut du phoque gris ( <u>Halichoerus</u> grypus) en France".
N:11	S G Brown	"Whale marking in the North Atlantic 1950-78".
N:12	A R Hiby and J Harwood	"The reliability of population estimates for British grey seals".
N:13	T S McCann, W N Bonner, J H Prime and C Ricketts	"Age distribution and age at first pregnancy of South Georgia elephant seals".
N:14	J H Prime	"Observations on the digestion of some gadoid fish otoliths by a young common seal".
N:15 Ref. Marine Enviromental Quality Cttee	General Secretary	"UNEP plan of action for marine mammals".

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N:16	H Winn, T Thompson, W Cummings, H Jain, J Hudnall, H Hays and W Steiner	"Song of the humpback whale - population comparisons".
N:17	P J H Reijnders	"Management and conservation of the harbour seal population ( <u>Phoca vitulina</u> ) in the inter- national Wadden Sea area".
N:18 Ref. Marine Environmental Quality Cttee	P J H Reijnders	"Organochlorine and heavy metal residues in harbour seals of Schleswig-Holstein plus Denmark, and the Netherlands in relation to the reproduction in both populations".

### Reference Papers to the Marine Mammals Committee

E:39 Marine Environmental Quality Cttee	J C Duinker and M Th. J Hillebrand	"Mobilization of organochlorines from female lipid tissue and transplacental transfer to fetus in a harbour porpoise (Phocoena phocoena) in a contaminated area".
E:40 Marine Environmental Quality Cttee	J C Duinker, M Th. J Hillebrand and R F Nolting	"Organochlorines and metals in harbour seals (Dutch Wadden Sea)".
G:40 Demersal Fish Cttee	P H Odense	"Phocanema decipiens, the codworm problem and solutions".

## POSTER SESSIONS AT THE 67th STATUTORY MEETING

No.1	H Möller	"Predation of <u>Aurelia medusae</u> on herring larvae in Kiel Bight".
No.2	H Grave and H Möller	"Estimation of algal beach cost at the western Baltic coast".
No.3	H Möller and H H Janssen	"Feeding of Anemonia sulcata".
No.4	T Pommeranz, H Fischer, C Herrmann, H Kühn and P Ohm	"A preliminary description of the multiple plankton sampler' Messhai'".
No.5		Withdrawn.
No.6	H Möller	"A summer survey of zooplankton in the North Sea and the Baltic".