

Contributions to the 1997 Annual Science Conference

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Requests for additional copies of documents when supplies run out

Authors have been requested to provide 200 copies of their papers (125 to be sent to the United States and 75 to the ICES Secretariat). Copies of the various papers are made available in the Documents Room. Participants may help themselves to copies of scientific papers on a first-come-first-served basis. Should supplies of particular papers run out, those wishing to obtain copies should not contact the Secretariat but approach the senior author of the paper concerned (name and address given with Abstracts). It is hoped that authors will send copies to those requesting them once the Annual Science Conference is over.

GENERAL ASSEMBLY REPORTS AND PAPERS OF GENERAL INTEREST

- Gen:1 Observers' Reports from Cooperating Organisations
- Gen:2 ICES Activities in 1996/1997
- Gen:3 (Del:7) Elections and Appointments by the Council at 1997 Annual Science Conference (85th Statutory Meeting) (E+F)
- Gen:4 (A:5) Report of Mid-Term Consultative Committee Meeting, and ASC Programme Planning
- Gen:5 Advance Release of Tables, 1-6 of ICES Fisheries Statistics, Vol. 81, 1996
- Gen:6 1996/1997 Overview of ICES Committees and Subsidiary Groups and their Shadowing by Secretariat Staff, and Schedule of ICES Meetings and List of CM Codes
- Gen:7 Report on ICES Symposia

DEL - DELEGATES DOCUMENTS

- Del:1 Final Accounts for Financial Year 1995/1996
- Del:2 Progress Report on Administration
- Del:3 Delegates Meeting: Topics for “Extra” Session
- Del:4 Estimated Accounts for Financial Year 1996/1997 (E+F)
- Del:5 Budget for Financial Year 1997/1998 (E+F)
- Del:6 Forecast Budget for Financial Year 1998/1999 (E+F)
- Del:7 (Gen:3) Elections and Appointments by the Council at the 1997 Annual Science Conference (85th Statutory Meeting)
- Del:8 Arrangements for 1998 (86th Statutory Meeting), 1999 (87th Statutory Meeting), and Subsequent Annual Science Conferences
- Del:9 Cooperation with Other International Organisations: Working and Financial Arrangements
- Del:10 Report on Meeting of ICES/Commissions Working Group on Cooperative Procedures (24-25 April 1997)
- Del:11 Report of the Bureau Working Group on Planning for the ICES Centenary
- Del:12 Report of the Bureau Working Group on Restructuring of ICES Advisory Committees
- Del:13 Proposals for Eleventh ICES Dialogue Meeting
- Del:14 Progress Report on Planning for ICES Young Scientists Conference
- Del:15 North Sea Process: Report on 1997 Intermediate Ministerial Meeting (13-14 March), and Preparations for Fifth International Conference on the Protection of the North Sea
- Del:16 Status Report on ICES/GLOBEC Office
- Del:17 Selection of New Editor of *ICES Journal of Marine Science*
- Del:18 Proposal by USA to Change Rule of Procedure No. 33 Regarding Attendance at Finance Committee Meetings
- Del:19 Use and Future Development of Capital Reserve Fund

(E+F) in English and French

FI - FINANCE COMMITTEE

FI:1* Agenda for Finance Committee

PUB - PUBLICATIONS COMMITTEE

Pub:1 Agenda for Publications Committee
Pub:2 Review of ICES publication activities in 1996/1997
Pub:3 Sale and promotion of ICES publications during the last three years
Pub:4 Editors' Report for 1996/1997
Pub:5 Academic Press Publisher's Report for 1996/1997
Pub:6 Status of ICES/Academic Press joint account for 1996
Pub:7 *ICES Cooperative Research Report* series: Editor's Report for 1996/1997 with Annex

* For Finance Committee and Delegates only

CONSULTATIVE COMMITTEE

- A:1 Agenda for Consultative Committee
- A:2 Minutes from ACFM Meeting, 24 October to 1 November 1996
- A:3 Minutes from ACFM Meeting 14-23 May 1997
- A:4 Minutes from ACME Meeting 9-14 June 1997
- A:5 (Gen:4) Report of Mid-Term Consultative Committee Meeting, and ASC Programme Planning
- A:6, Ref. Report of the Study Group on Work Programme to Evaluate the Environmental Impacts of
Assess, Env. Fisheries (Withdrawn)
- A:7 Second Report of the ICES/GLOBEC North Atlantic Regional Coordination Group
- A:8, Ref. C, G, Report of the ICES/GLOBEC North Atlantic Regional Coordination Group/Steering Group for
H, J, L the ICES/GLOBEC North Atlantic Regional Office
- A:9, Ref. C, G, ICES/GLOBEC Working Group on Cod and Climate Change (Withdrawn)
H, J, L
- A:10, Ref. Study Group on Resource Management
Assess/Env, B,
D, F, G, H, J, K,
M
- A:11 (Del:12, Report of the Bureau WG on Restructuring of ICES Advisory Committees
Assess:18,
Env:11)
- A:12 Compendium of Draft Recommendations

FISH CAPTURE COMMITTEE

- B:1 Study Group on Unaccounted Mortality in Fisheries
- B:2 Working Group on Fishing Technology and Fish Behaviour
- B:3 Joint Session of the Working Group on Fisheries Acoustics and Technology and the Working Group of Fishing Technology and Fish Behaviour
- B:4 Study Group on Echo Trace Classification
- B:5 Working Group on Fisheries Acoustics Science and Technology
- B:6 Study Group on the Use of Selectivity Measurements in Stock Assessment
- B:7 Study Group on Grid (Grate) Sorting Systems in Trawls, Beam Trawls and Seine Nets

REFERENCE PAPER: A:10

HYDROGRAPHY COMMITTEE

- C:1 Working Group on Shelf Seas Oceanography
- C:2 Working Group on Marine Data Management
- C:3 Working Group on Oceanic Hydrography

REFERENCE PAPERS: A:8, A:9

STATISTICS COMMITTEE

- D:1 Fishery Secretary: Progress Report 1996/1997
- D:2 Joint Meeting of Statistics Committee Liaison Working Group and the EUROSTAT Working Group on Fishery Statistics

REFERENCE PAPERS: A:10, Env:1, Env:2, Env:11

MARINE ENVIRONMENTAL QUALITY COMMITTEE

- E:1 Working Group on the Baltic Marine Environment
- E:2 ICES/HELCOM Steering Group on Quality Assurance of Chemical Measurements in the Baltic Sea
- E:3 ICES/HELCOM Steering Group on Quality Assurance of Biological Measurements in the Baltic Sea
- E:4 Working Group on the Effects of Extraction of Marine Sediments on the Marine Ecosystem
- E:5 ICES/HELCOM Workshop on Quality Assurance of Pelagic Biological Measurements in the Baltic Sea
- E:6 ICES/HELCOM Workshop/Training Course on Phytoplankton
- E:7 ICES/HELCOM Workshop/Training Course on Protozooplankton and Microzooplankton
- E:8 ICES/HELCOM Benthos Taxonomic Workshop
- E:9 *ICES Techniques in Marine Environmental Sciences: Editor's Report for 1996/1997*

REFERENCE PAPERS: Env:1, Env:2, Env:3, Env:4, Env:5, Env:6, Env:7, Env:8, Env:11

MARICULTURE COMMITTEE

- F:1 ICES Identification Leaflets for Diseases and Parasites of Fish and Shellfish. Editors Report 1996/1997
- F:2 Ad Hoc Meeting on The Use of Liver Pathology of Flatfish for Monitoring Biological Effects of Contaminants
- F:3 Study Group on Statistical Analysis of Fish Disease Data in Marine Fish Stocks
- F:4 Working Group on the Application of Genetics in Fisheries and Mariculture
- F:5, Ref. Env. Working Group on Environmental Interactions of Mariculture
- F:6, Ref. Env. Working Group on Pathology and Diseases of Marine Organisms
- F:7 Working Group on Marine Fish Culture

REFERENCE PAPERS: A:10, M:4, Env:6

DEMERSAL FISH COMMITTEE

- G:1 ICES/NAFO Workshop on Greenland Halibut Age Reading
- G:2, Ref. Study Group on Elasmobranch Fishes
Assess
- G:3, Ref. Study Group on Beam Trawl Surveys
Assess
- G:4 Report on 0-Group Fish Survey in Iceland Waters, August 1997

REFERENCE PAPERS: A:8, A:9, A:10, H:2

PELAGIC FISH COMMITTEE

- H:1 Planning Group for Sardine Acoustic Survey in ICES Sub-Areas VIII and IX
- H:2, Ref. Study Group on the Management Performance of Individual Transferable Quota (ITQ) Systems
Assess, G, J
- H:3 Planning Group on Surveys on Pelagic Fish in the Norwegian Sea
- H:4 Working Group on Mackerel and Horse Mackerel Egg Surveys
- H:5 Planning Group for Herring Surveys
- H:6 International Bottom Trawl Survey Working Group
- H:7 Workshop on Sardine Otolith Age Reading
- H:8 Report on the International Bottom Trawl Survey in the North Sea, Skagerrak, and Kattegat in 1996: Quarter I
- H:9 Report on the International Bottom Trawl Survey in the North Sea, Skagerrak, and Kattegat in 1997: Quarter I
- H:10 Report on the International Bottom Trawl Survey in the North Sea, Skagerrak, and Kattegat in 1991, Quarters 2-4
- H:11 Report of 1996 ICES Coordinated Acoustic Survey of ICES Divisions IIIa, IVa, IVb and VIa

REFERENCE PAPERS: A:8, A:9, A:10

BALTIC FISH COMMITTEE

- J:1 Study Group on Baltic Cod Age-Reading
- J:2, Ref. Assess Study Group on Multispecies Model Implementation in the Baltic
- J:3 Study Group on Baltic Acoustic Data
- J:4, Ref. Assess Baltic International Fish Survey Working Group
- J:5 Baltic Herring Age Reading Study Group
- J:6 Workshop on Standard Trawls for Baltic International Fish Surveys

REFERENCE PAPERS: A:8, A:9, A:10, H:2

SHELLFISH COMMITTEE

- K:1 Workshop on Shellfish Bivalve Cultivation: Growth, Modelling and Impact on the Ecosystem
- K:2 Working Group on Cephalopod Fisheries and Life History
- K:3 Working Group on *Crangon* Fisheries and Life History
- K:4 Study Group on Life Histories of *Nephrops*
- K:5 Study Group on the Biological and Life History of Crabs

REFERENCE PAPER: A:10

BIOLOGICAL OCEANOGRAPHY COMMITTEE

- L:1 ICES Identification Leaflets for Plankton. Editors Report 1996/1997
- L:2 Workshop on Development of In Situ growth rate measurements for dinoflagellates
- L:3 Working Group on Seabird Ecology
- L:4 Working Group on Zooplankton Ecology
- L:5, Ref. Env. Working Group on Phytoplankton Ecology
- L:6 ICES/IOC Working Group on Harmful Algal Bloom Dynamics
- L:7 Benthos Ecology Working Group
- L:8 Working Group on Recruitment Processes

REFERENCE PAPERS: A:8, A:9,. Env:7, Env:8

ANACAT FISH COMMITTEE

- M:1 EIFAC/ICES Working Group on Eels
- M:2 Stock Identification Methods Working Group
- M:3 Study Group on Ocean Salmon Tagging Experiments with Data Logging Tags
- M:4, Ref. F Workshop on the Interactions Between Salmon Lice and Salmonids
- M:5 ICES Compilation of Microtag, Finclip and External Tag Releases 1996

REFERENCE PAPERS: A:10

MARINE MAMMALS COMMITTEE

- N:1, Ref. Working Group on Seals and Small Cetaceans in European Seas
Assess, Env.
- N:2 List of Publications of Interest to the Marine Mammals Committee

ENV - ENVIRONMENT-RELATED WORKING GROUP REPORTS

Env:1, Ref. D, E	Working Group on Statistical Aspects of Environmental Monitoring
Env:2, Ref. D, E	Marine Chemistry Working Group
Env:3, Ref. E	Working Group on Environmental Assessment and Monitoring Strategies
Env:4, Ref. E	Working Group on Marine Sediments in Relation to Pollution
Env:5, Ref. E	Working Group on Biological Effects of Contaminants
Env:6, Ref. E, F	Working Group on Introductions and Transfers of Marine Organisms
Env:7, Ref. E, L	ICES/OSPAR Steering Group on Quality Assurance of Biological Measurements Related to Eutrophication Effects
Env:8, Ref. E, L	ICES/IOC/IMO Study Group on Ballast Water and Sediments
Env:9	Study Group on Marine Biocontrol of Invasive Species
Env:10	Study Group on Monitoring Programmes for Contaminants in Sediments
Env:11, Ref. D, E	ICES/OSPAR Workshop on the Identification of Statistical Methods for Trend Detection
Env:12, (Del:12, A:11, Assess:18)	Report of the Bureau Working Group on the Restructuring of ICES Advisory Committees

REFERENCE PAPERS: A:6, A:10, F:5, F:6, L:5, N:1

ASSESSMENT WORKING GROUPS

Assess:1	Withdrawn
Assess:2	Working Group on the Assessment of Northern Shelf Demersal Stocks
Assess:3	Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine and Anchovy
Assess:4	Arctic Fisheries Working Group
Assess:5	Working Group on the Assessment of Southern Shelf Demersal Stocks
Assess:6	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Assess:7	Study Group on the Precautionary Approach to Fisheries Management
Assess:8	Herring Assessment Working Group for the Area South of 62° N
Assess:9	Working Group on <i>Nephrops</i> Stocks
Assess:10	Working Group on North Atlantic Salmon Joint session Working Group on North Atlantic Salmon and Baltic Salmon and Trout Assessment Working Group
Assess:11	Baltic Salmon and Trout Assessment Working Group
Assess:12	Baltic Fisheries Assessment Working Group
Assess:13	North-Western Working Group
Assess:14	Northern Pelagic and Blue Whiting Fisheries Working Group
Assess:15	Comprehensive Fishery Evaluation Working Group
Assess:16	Multispecies Assessment Working Group
Assess:17	Study Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Assess:18 (Del:12, A:11, Env:12)	Report of the Bureau Working Group on the Restructuring of ICES Advisory Committees

REFERENCE PAPERS: A:6, A:10, G:2, G:3, H:2, J:2, J:4, N:1

JOINT ACFM/ACME WORKING GROUP

Assess/ Working Group on Ecosystem Effects of Fishing Activities
Env:1 1998

REFERENCE PAPERS: A:10

THEME SESSION ON THE ROLE OF SMALL-SCALE PHYSICAL AND BIOLOGICAL PROCESSES IN THE DYNAMICS OF HARMFUL ALGAL BLOOMS (O)

O:01	T. Osborn	Microstructure, finestructure and thin layers
O:02	C.H. Gibson <i>et al.</i>	Fossil turbulence pattern recognition by dinoflagellates and diatoms may determine their growth strategies
O:03	M. Estrada <i>et al.</i>	Margalef's hypothesis. Experimental approaches
O:04	Withdrawn	
O:05 Poster	T. Gytre <i>et al.</i>	Resolving small scale turbulence from an underwater tower
O:06	J.M. Sullivan <i>et al.</i>	The effects of small-scale turbulence on marine dinoflagellates
O:07	A.K. Hanson Jr. and P.L. Donaghay	Finescale nutrient gradients and thin-layered harmful algal bloom dynamics in vertically-stratified coastal waters
O:08	J. Rines <i>et al.</i>	The effects of small-scale turbulence on the structural integrity of chain-forming diatoms
O:09	P.L. Donagay <i>et al.</i>	Physical and biological control of the formation, maintenance and dissipation of thin layers of harmful algal in the pycnoclines of stratified coastal waters
O:10	C.T. Tynan	Effects of the nearshore wave environment on the abundance and species composition of phytoplankton
O:11	J. Katz and P.L. Donaghay	Quantification of small scale physical processes operating at the scale of the organism
O:12	Withdrawn	

THEME SESSION ON DIADROMOUS FISH EXTINCTION: THREATS ON LOCAL AND GLOBAL SCALES (P)

P:01	J.L. Nielsen		Extinction risk and genetic variation in anadromous steelhead at the southern extent of their range
P:02	C.S. Grogan and Boreman	J.	Estimating the probability that historical populations of fish species are extirpated
P:03	J.B. Dempson <i>et al.</i>		Evaluation of an alternate strategy to enhance salmon populations: cage rearing wild Atlantic salmon smolts from Conne River, Newfoundland
P:04	F. Hartmann and Nellen	W.	The situation of the European Eel, <i>Anguilla anguilla</i> , after the invasion of the introduced swim bladder parasite <i>Anguillicola crassus</i> , using the eel population in the lower Elbe as an example
P:05	W. Nellen and Plate	E.	Rainbow trouts and brown trouts in European rivers. Do they compete?
P:06	A. Mitans <i>et al.</i>		State of Baltic salmon stocks in Latvian rivers in relation to M74 mortality syndrome
P:07	R.M. McDowell		Different kinds of diadromy: different kinds of conservation problems
P:08	B. Riddell and Cass	A.	A life history model for assessing alternative management policies for depressed chinook salmon from the west coast of Vancouver Island, British Columbia
P:09	J. Lichatowich		Depletion and extinction of Pacific salmon (<i>Oncorhynchus</i> spp.): A different perspective
P:10	R. Lande		Risk factors in extinction and overexploitation
P:11	Z. Chelkowski		Disappearance of the spawning grounds of the Atlantic salmon (<i>Salmo salar</i> L.) in the Drawa and Plociczna Rivers
P:12	B.H. Letcher and T.L. King		Tools for evaluation of anadromous fish restoration: potential for large-scale genetic marking of Connecticut River Atlantic salmon
P:13	O.T. Skilbrei and Skaala	Ø.	A comparison between three Atlantic salmon river stocks; using classical population genetics, differences in life history traits and performance sea ranching
P:14	Ö. Karlström and Karlsson	L.	Previous and current status of Swedish salmon populations: threats and their mitigation
P:15	Z. Chelkowski		Quantitative decrease of the Atlantic Salmon (<i>Salmo salar</i> L.) broodstock in the Drawa River
P:16	T.C. Wainwright and R.G. Kope		Issues and methods of extinction risk assessment for US west coast salmon
P:17	Withdrawn		
P:18	Withdrawn		
P:19 Poster	A. Locke		Modelling the effects of post-stocking survival rates on the success of hatchery stocking of Atlantic salmon
P:20	S. McKinnell		Atlantic salmon in the Baltic Sea - the world's second-most disturbed salmon populations
P:21	R. Reisenbichler		Genetic changes from artificial propagation of Pacific salmon affect population viability

P:22	M. Luczynski <i>et al.</i>	Biochemical genetic characteristic of four Polish sea trout (<i>Salmo trutta m. trutta</i>) populations
P:23	K.E. Skóra and M. Haluch	The food composition of Atlantic salmon (<i>Salmo salar</i> L.), sea trout (<i>Salmo trutta</i> L.) and rainbow trout (<i>Oncorhynchus mykiss</i> Walbaum) caught in the Puck Bay (Baltic Sea)
P:24	Withdrawn	
P:25	V.L. Tretyak <i>et al.</i>	Assessment of optimal spawning stock and factors affecting the abundance of Atlantic salmon in the Tuloma River
P:26 Poster	J. Sawada	Genetics, demography and salmon extinction

**THEME SESSION ON BY-CATCH OF MARINE MAMMALS GEAR TECHNOLOGY,
BEHAVIOUR, AND KILL RATES (Q)**

Q:01	F. Julian <i>et al.</i>		Reduction of marine mammal by-catch in the West coast drift gillnet fishery for swordfish and sharks using pingers: Preliminary experimental results
Q:02 Poster	C. Pérez <i>et al.</i>		Stranding and by-catch of cetaceans in the Northeastern Atlantic during 1996
Q:03 Poster	C. Costa and Azzali	M.	Elaboration of sword-fish fishing methods compatible with the safeguard either of juvenile sword-fishes or of protected species
Q:04 Poster	G.B. Stenson and Reddin	D.G.	Incidental catches of small cetaceans in experimental salmon drift nets in the Northwest Atlantic
Q:05	Y. Morizur <i>et al.</i>		Incidental mammal catches in pelagic trawl fisheries of the North East Atlantic
Q:06	A. Di Natale		By-catch of marine mammals in tuna and swordfish fisheries: the Mediterranean case
Q:07	R.A. Kastelein <i>et al.</i>		The effects of different sounds on the behaviour of harbour porpoises
Q:08	S. Lens		Interactions between marine mammals and deep water trawlers in the NAFO regulatory area
Q:09	Withdrawn		
Q:10	L. Antoine <i>et al.</i>		Dolphin bycatch in tune driftnet in North East Atlantic
Q:11	S.G. Lunneryd and Westerberg	H.	By-catch of and gear damages by grey seal (<i>Halichoerus grypus</i>) in Swedish waters
Q:12	H. Westerberg and Stenström	J.	Towards an efficient seal protection of a salmon trap nets
Q:13	M. André		Background noise from shipping and fishing operations may induce acoustic trauma in marine mammals
Q:14	G.P. Scott <i>et al.</i>		Estimates of marine mammal and marine turtle catch by the US Atlantic pelagic longline fleet in 1994-1995
Q:15	P.R. Connelly <i>et al.</i>		Acoustic techniques to study cetacean behaviour around pelagic trawls
Q:16	A.D. Goodson <i>et al.</i>		Set gillnet acoustic deterrents for harbour porpoises, <i>Phocoena phocoena</i> : improving the technology
Q:17	A.D. Goodson <i>et al.</i>		Aversive sounds and sound pressure levels for the Harbour porpoise <i>Phocoena phocoena</i> : an initial field study
Q:18	Withdrawn		
Q:19	S. Mazzola <i>et al.</i>		An experience on the quantification and mapping of dolphin by-catches in the Sicilian Channel and testing of a acoustic-based possible solution
Q:20	de Haan <i>et al.</i>		Prevention of by-catch of small cetaceans in pelagic trawl by technical means (project CETASEL)

THEME SESSION ON ARCTIC OCEANOGRAPHIC PROCESSES (R)

R:01	L. Føyn <i>et al.</i>	Formation of nutrient rich bottom water in the eastern part of the Barents Sea
R:02	R.B. Rivkin	Microbial processes in the Arctic Ocean and adjacent water: role in biogenic carbon export
R:03	S. Pfirman <i>et al.</i>	Fate of sea ice exported from the Kara, Laptev and east Siberian Seas
R:04	N.F. Plotitsyna and L.I. Kireeva	Content of pollutants in marine organisms of the Barents Sea
R:05	I.M. Belkin <i>et al.</i>	On the North Atlantic “Great Salinity Anomalies”
R:06	Withdrawn	
R:07	Withdrawn	
R:08	H. Loeng	Ocean pathways in the Arctic
R:09	J.M. Bowers	Radioactive contamination of the Arctic
R:10	E. Wetherhead	Effects of UV radiation in the Arctic
R:11	D. Muir	POPs in the Arctic
R:12	I. Smolyar and N. Adrov	Annual and interannual cycles of the Atlantic Water in the Barents Sea

THEME SESSION ON SPATIAL GRADIENTS IN ESTUARINE SYSTEMS (S)

S:01	K.W. Able <i>et al.</i>	Spatial variation in Delaware Bay (USA) marsh creek fish assemblages
S:02	A.M. Gospodarek <i>et al.</i>	Spatial and temporal variation in the growth rates of larval bay anchovy (<i>Anchoa mitchilli</i>) in the lower Hudson River estuary
S:03	D. Secor	Is otolith strontium a useful scalar of life-cycles in estuarine fishes?
S:04	R. Thiel <i>et al.</i>	Spatial gradients of food consumption and production of dominant fish species in the Elbe estuary, Germany
S:05	B. Draganik	Effect of river inflow on the fish assemblages in the Polish coastal waters
S:06	Withdrawn	
S:07	J.E. Prentice and A.K. Hanson Jr.	The spatial and temporal variability of downwelling solar ultraviolet (UV) radiation and UVB photoinhibition of primary production in the estuarine waters of Narragansett Bay, RI, USA
S:08 Poster	K.M. Lehmann <i>et al.</i>	Spatial distribution and abundance of cod, herring and sprat in the Bornholm Basin 1994 to 1996
S:09	H. Mosegaard <i>et al.</i>	Back-calculating Baltic cod size at age from otolith measurements
S:10	D. Schnack	Influence of hydrographic gradients and fishery on the biological interaction and balance between sprat and cod stocks in the Baltic Sea
S:11	W.R. Boynton <i>et al.</i>	Interactions between physics and biology in the estuarine turbidity maximum of Chesapeake Bay, USA
S:12	I.K. Bartol and M. Vecchione	Distribution of the euryhaline squid <i>Lolliguncula brevis</i> in the Chesapeake Bay: Relationships between movement patterns and physical gradients
S:13	A.F. Sharov and B.J. Rothschild	Spatial distribution of the blue crab in Chesapeake Bay in relation to gradients in temperature, salinity and nutrients
S:14 Poster	N. Rohlf	Behaviour studies of Baltic cod (<i>Gadus morhua</i>) larvae originating from Bornholm Basin
S:15	J.P. Manderson <i>et al.</i>	Species responses to environmental gradients and the description of estuarine landscape pattern
S:16	Withdrawn	
S:17	T.K. Frazer	The movement of nitrogen in Florida's spring-fed rivers and their estuaries: using stable nitrogen isotopes as <i>in situ</i> tracers
S:18	M. Roman <i>et al.</i>	Temporal and spatial patterns of zooplankton in the Chesapeake Bay turbidity maximum
S:19	J. Rasmus Nielsen <i>et al.</i>	Describing distribution and density patterns of metamorphosed 0- and 1-group cod related to hydrographical conditions, physical frontal zones, and bottom topography using hydroacoustic and trawl sampling methods in the central Baltic Sea (Preliminary Results)
S:20	A. Locke	Use of estuarine gradients by immature anadromous fishes in the southern Gulf of St. Lawrence
S:21	Withdrawn	
S:22 Poster	A. Draxler <i>et al.</i>	Association of winter flounder growth rates with habitat

biogeochemistry

S:23	Withdrawn	
S:24	P. Hanson and V.S. Zdanowicz	Elemental composition of fish otoliths and contaminant levels along an estuarine pollution gradient
S:25	Withdrawn	
S:26 Poster	T. Johannessen and Dahl	E. Historical changes in oxygen concentrations in relation to salinity, depth and distance to open coast in six fjords on the Norwegian Skagerrak coast
S:27 Poster	E.M. Acha <i>et al.</i>	Spawning of the whitemouth croaker <i>Micropogonias furnieri</i> (<i>Pisces Sciaenidae</i>) conditioned by strong salinity gradients in the Rio de la Plata Estuary
S:28	J.H. Sharp	Linkage of long-term water quality monitoring and spatial gradients of chemistry and living resources in the Delaware Estuary, USA
S:29	A. Orłowski	Diel and lunar variations in acoustic measurements of clupeoids in the Baltic Sea

**THEME SESSION ON GLOBEC: RESULTS FROM INTERDISCIPLINARY
PROGRAMMES IN THE NORTH ATLANTIC (T)**

T:01	B. Planque and P.C. Reid	Changes in <i>Calanus finmarchicus</i> populations on a North Atlantic scale
T:02	B. Sullivan <i>et al.</i>	Abundance and distribution of planktonic hydroids with respect to larval fish and hydrographic features on Georges Bank
T:03	G. Klein-MacPhee <i>et al.</i>	Mortality of Larval Cod Related to Predation by the hydroid <i>Clytia gracilis</i> on Georges Bank
T:04	C. Ashjian <i>et al.</i>	Distribution of plankton and particles across George Bank during 1994-1995 GLOBEC cruises: Results of cross-bank surveys using the video plankton recorder (VPR)
T:05	M.R. Heath <i>et al.</i>	Climate fluctuations and the abundance of <i>Calanus finmarchicus</i> in the North Sea
T:06	A.C. Bucklin and A.M. Bentley	Seasonal patterns of distribution and abundance of the copepods, <i>Pseudocalanus moultoni</i> and <i>P. newmani</i> , on Georges Bank: evidence for a dynamic balance between retention and loss
T:07	J.J. Bisagni	Model estimates of interannual stratification variability on southern Georges Bank, 1985-1992 and 1995
T:08	R. Limeburner and R. Beardsley	Sources, sinks, and recirculation over Georges Bank during 1995-1997
T:09	J.P. Manning and <i>et al.</i>	Advection of Cod and Haddock along the southern flank of Georges bank in the spring of 1995 and 1997
T:10 Poster	R.C. Groman and P.H. Wiebe	The US Globec Georges Bank study data and information management system
T:11	Withdrawn	
T:12 Poster	C.V.W. Lewis <i>et al.</i>	Effect of daily and interannual wind variability on circulation and plankton transport over Georges Bank
T:13	C.B. Miller <i>et al.</i>	Coupling of individual-based population dynamical models for stocks of <i>Calanus finmarchicus</i> with physical models of flow in the region of Georges Bank
T:14 Poster	A.J. Pershing <i>et al.</i>	Evidence for vertical circulation cells in the well-mixed area of Georges Bank obtained using high-frequency acoustics
T:15	J.A. Quinlan <i>et al.</i>	A model-based study on the role of microzooplankton and prey aggregation in the feeding environment of Georges Bank larval cod and haddock
T:16	L.P. Madin <i>et al.</i>	Estimating the impact of invertebrate predation on target species of copepods on Georges Bank
T:17	F.H. Page <i>et al.</i>	Cod and haddock spawning on Georges Bank in relation to water residence times
T:18	D. Lynch <i>et al.</i>	Modelling copepod abundance and distribution on Georges Bank
T:19	R.W. Houghton	Lagrangian flow at the foot of a shelfbreak front using a dye tracer injected into the bottom boundary layer
T:20	D. McGillicuddy <i>et al.</i>	Evaluating the synopticity of the US Globec GEORGE Bank broad-scale sampling pattern with observational system simulation

experiments

T:21	Withdrawn	
T:22	O.P. Pedersen <i>et al.</i>	The life history of <i>Calanus finmarchicus</i> at the Norwegian coast: multiple generations or variable timing of recruitment in an advective environment
T:23 Poster	K. Tande <i>et al.</i>	Trans-Atlantic study of <i>Calanus finmarchicus</i> (TASC) - Philosophy, targets and status
T:24	I. Martinez <i>et al.</i>	Genetic structuring of <i>Pandalus borealis</i> in the Northeast Atlantic II. RAPD analysis
T:25	M. de Fatima Borges <i>et al.</i>	Is the decreasing recruitment of pelagic fish (sardine and horse mackerel) on the Portuguese continental shelf (ICES Division IXa) induced by a change on the environmental conditions?
T:26	L. Valdes <i>et al.</i>	Spatial and temporal changes of zooplankton biomass in the Cantabrian Sea (Bay of Biscay) and NW coast of Spain in relation to environmental conditions: A multidisciplinary study on SARP
T:27	E. Durbin <i>et al.</i>	Abundance and distribution of zooplankton on Georges Bank during 1995 and 1996
T:28 Poster	K. Wishner <i>et al.</i>	Zooplankton and its association with bio-optically defined water masses on Georges Bank: Preliminary results from the 1997 US GLOBEC program
T:29 Poster	S.R. Werner and R.C. Beardsley	A model-based study on the role of microzooplankton and prey aggregation in the feeding environment of Georges Bank larval cod and haddock
T:30 Poster	P.H. Wiebe <i>et al.</i>	Broad-scale patterns of high frequency volume backscattering on Georges Bank during late spring/early summer of 1994,1995 and 1996
T:31	J.H. Churchill	Horizontal shears and dispersion over the southern flank of Georges Bank
T:32	K. Helle and M. Pennington	The relation between the spatial distributions of early juvenile cod (<i>Gadus morhua</i> L.) and zooplankton biomass in the Barents Sea
T:33	R.C. Beardsley <i>et al.</i>	A preliminary description of the heat budget, southern flank of Georges Bank, spring-summer, 1995: part 1. Surface heat flux
T:34	Withdrawn	
T:35	J. Green <i>et al.</i>	Trophodynamics of cod and haddock larvae from GLOBEC broadscale studies on Georges Bank
T:36	N.L. Shackell and K.T. Frank	Spatial Evolution of cod (<i>Gadus morhua</i>) and haddock (<i>Melanogrammus aeglefinus</i>) year classes on the Scotian Shelf as inferred from growth variation of juveniles
T:37 Poster	J.D. Irish <i>et al.</i>	Hurricane Edouard
T:38	J.D. Irish <i>et al.</i>	U.S. GLOBEC Georges Bank long-term moored program
T:39 Poster	J.D. Irish <i>et al.</i>	Internal solitary waves on the southern flank of Georges Bank
T:40 Poster	A. Conversi and S. Piontkovski	Seasonal and interannual changes in <i>Calanus finmarchicus</i> and <i>pseudocalanus</i> spp. in the Northeastern US Shelf
T:41	R.G. Lough <i>et al.</i>	A comparative study of feeding, condition, and growth of larval cod and haddock on southern Georges Bank, May 1993 vs. May 1994

T:42 Poster	J. Van Keuren <i>et al.</i>	Factors critical to the foraging success of larval cod (<i>Gadus morhua</i>) on Georges Bank
T:43	C. Naimie <i>et al.</i>	Comparison between numerically simulated and observed drifter trajectories on Georges Bank
T:44	D.R. Lynch <i>et al.</i>	Data assimilation for circulation. Hindcasting on Georges Bank
T:45 Poster	C. Lee	Scotian Shelf water intrusions and storm-induced transports on the southern flank of Georges Bank: preliminary results from the winter SeaSoar cruise
T:46 Poster	C. Chen <i>et al.</i>	Plankton production over Georges Bank: A 3-D coupled physical-biological modeling study
T:47 Poster	R. Burgett <i>et al.</i>	Bottom stress estimates from turbulent dissipation rate measurements on Georges Bank
T:48	A.R. Solow <i>et al.</i>	Retrospective analysis of variability in zooplankton composition on Georges Bank and the Northwest Atlantic
T:49	J.A Runge	Spatial and temporal variation in egg production of <i>Calanus finmarchicus</i> on Georges Bank: implications for the productivity of prey of cod and haddock larvae
T:50 Poster	M.C. Benfield <i>et al.</i>	3D mapping of zooplankton distributions in a stratified region of Georges Bank: Results from optical and acoustic sensing
T:51	P.C. Smith <i>et al.</i>	Interannual variability of boundary fluxes and water mass properties in the Gulf of Maine and on Georges Bank: 1993-96
T:52	B. Niehoff and H-J Hirche	The reproduction of <i>Calanus finmarchicus</i> in Norwegian Sea in spring
T:53	S. Irogoien <i>et al.</i>	<i>Calanus finmarchicus</i> feeding and reproduction: a high frequency time series at weathership M. Norwegian Sea during the 1997 spring bloom
T:54	K. Brander	Report on workshop on predicting decadal scale ocean climate fluctuations in the North Atlantic

**THEME SESSION ON REPRODUCTIVE DISTURBANCES OF MARINE SPECIES, AND
CONTAMINANT-RELATED ISSUES (U)**

U:01	Y. Allen <i>et al.</i>	Effects of marine environmental oestrogens
U:02	E.I. Alekseeva <i>et al.</i>	Ovaries maturation, batch eggs forming, batch fecundity and distribution during sex cycle of Baltic sprat <i>Sprattus sprattus balticus</i>
U:03	H. Murua and L. Motos	Length at first maturity of roughhead grenadier, <i>Macrourus berglax</i> , in NAFO regulatory 3LMN area using historical criteria
U:04	Withdrawn	
U:05	G. Kornilovs	Long-term variations of fecundity of the Gulf of Riga herring
U:06	N.E.I. Bachari <i>et al.</i>	Validity of satellite image to the monitoring of marine quality. Application to Oran City, Algeria
U:07	L.L. Johnson <i>et al.</i>	Precocious sexual maturation and other reproductive anomalies in English sole from an urban waterway
U:08	T.K. Collier <i>et al.</i>	A comprehensive assessment of the impacts of contaminants on fish from an urban waterway
U:09	Withdrawn	
U:10	G.I. Petersen <i>et al.</i>	Body burdens of lipophilic xenobiotics and reproductive success in Baltic cod (<i>Gadus morhua</i>)
U:11	Withdrawn	
U:12	L Motos <i>et al.</i>	Egg production hake biomass in ICES Divisions VIIIa, b in 1995 in comparison with 1983
U:13	A.S. Zezera and E.S. Zezera	Recent variations of hydrological regime in the South-Eastern Baltic Sea and their impact upon cod spawning conditions
U:14	A.D. Rijnsdorp and A.D. Vethaak	Changes in reproductive parameters of North Sea plaice and sole between 1960 and 1995
U:15	Withdrawn	

THEME SESSION ON APPLYING THE PRECAUTIONARY APPROACH IN FISHERIES AND ENVIRONMENTAL MANAGEMENT (V)

V:01	L. J. Richards and J. T. Schnute	Quantifying risk in precautionary stock assessments
V:02	J. Rice	Precautionary approaches, ecosystem approaches and multispecies aspects of reference points
V:03	A. C. Cockcroft and A. I. L. Payne	Cautious fisheries management in South Africa: the fisheries for rock lobster
V:04	F. C. Coleman <i>et al.</i>	Management and conservation of temperate reef fishes
V:05	A. F. Sharov <i>et al.</i>	Fisheries strategies versus reproductive strategies: searching for consensus
V:06	P. Lewy and H. Lassen	From chaos to stability. The influence of stock-recruitment dynamics
V:07	R. M. Cook	The application of a sustainability criterion to demersal stocks in the ICES area
V:08	O. Maury and D. Gascuel	Short term yield and effort impacts of a precautionary management strategy based on marine refugia. Simulations with SHADYS (Simulateur H Alietique de D Ynamiques S patiales)
V:09	W. Gabriel <i>et al.</i>	Application of the precautionary approach from the bottom up: Uncertainty and stock rebuilding in the mid-Atlantic region of the Northwest Atlantic
V:10	J. Cross <i>et al.</i>	Essential fish habitat: A new fisheries management tool
V:11	S. Carlberg and S. Evans	Experiences of applying the precautionary approach in environmental management in an European framework

THEME SESSION ON THE CATCHING PERFORMANCE OF FISHING GEARS USED IN SURVEYS (W)

W:01	A. Fréchet	The use of multiple commercial boats to conduct a stratified-random survey for groundfish in the Gulf of St. Lawrence
W:02	S.J. Walsh	Fishing performance of mobile and static survey gears used in single and multi-species resource surveys: A review
W:03	M.F. Sigler	Sablefish (<i>Anaplopoma fimbria</i>) behavior in relation to longline
W:04	H. Dupouy <i>et al.</i>	How to estimate the biomass of a stock, the area of a fishery and the efficiency of the gears for sessile and low mortality animals: the example of the scallop
W:05	D Somerton <i>et al.</i>	Incorporating experimentally estimated values of survey trawl catchability into the stock assessment process
W:06	P. Munro <i>et al.</i>	Estimating size-dependent capture rates at the footrope of two different kinds of survey trawls
W:07	K. Weinberg and P. Munro	The effect of artificial light on escapement beneath a survey trawl
W:08	W. Moderhak	New concept of survey trawl gear
W:09	Withdrawn	
W:10	C.W. West <i>et al.</i>	Development of west coast slope survey sampling methodology
W:11	G.P. Arnold <i>et al.</i>	Availability and accessibility of demersal fish to survey gears: new observations of 'natural' behaviour obtained with electronic data storage tags
W:12	N.K. Luyeye <i>et al.</i>	Trawl sampling of pelagic species off Angola. Effects of avoidance, time of day, towing speed and tow duration
W:13	P.D. Winger <i>et al.</i>	Preliminary analysis of the swimming endurance of Atlantic cod (<i>Gadus morhua</i>) and American plaice (<i>Hippoglossoides platessoides</i>)
W:14	J.H. Vølstad and A. Sharov	A method for estimating dredge catching efficiency for blue crabs in Chesapeake Bay from removal experiments
W:15	P.A.M Steward and J. Rivoirard	Measurements of gear and environmental parameters during surveys with the GOV trawl
W:16	A. Aglen <i>et al.</i>	Fish density and catchability in bottom trawl surveys
W:17	A. Engås and T. Jørgensen	Estimates of encounter rates for gillnets relative to fish density
W:18	O.R. Godø and K. Michalsen	The use of data storage tags to study cod natural behaviour and availability to abundance surveys in the Barents Sea
W:19 Poster	I. Huse and J.T. Øvredal	Multiple applications of a towed acoustic platform
W:20	K. Korsbrekke and O. Nakken	Length and species dependent diurnal variation in catch rates in the Norwegian Barents Sea bottom trawl surveys
W:21	O.A. Misund	Sampling herring in the Norwegian Sea by pelagic trawl
W:22	E. Dahm	Escape strategies of different marine species under the footrope of survey trawls

THEME SESSION ON SYNTHESIS AND CRITICAL EVALUATION OF RESEARCH SURVEYS

Y:01 Poster	T. Gröhsler and E. Götze	Report on the Acoustic Survey in ICES Sub-divisions 21, 22, 23 and 24 in October 1996
Y:02 Poster	T. Gröhsler and E. Götze	Report on the Acoustic Survey in ICES Sub-divisions 21, 22, 23 and 24 in October 1994
Y:03	J. Bertrand <i>et al.</i>	An international bottom trawl survey in the Mediterranean: the MEDITS programme
Y:04	H. Vilhjálmsson	Report of surveys of the distribution, abundance and migrations of the Norwegian spring spawning herring, other pelagic fish and the environment of the Norwegian Sea and adjacent waters in late winter, spring and summer of 1997
Y:05 Poster	V. Marques <i>et al.</i>	Preliminary results from the joint sardine (<i>Sardina pilchardus</i>) DEPM and acoustic surveys in ICES Divisions IXa (Lat. 41° 50'N, 36°00'N)
Y:06	W.D. Tesler <i>et al.</i>	The data correlation of acoustic and bottom trawl surveys of Bering Sea walleye pollock
Y:07	M. Aschan and K. Sunnanå	Evaluation of the Norwegian shrimp surveys conducted in the Barents Sea and the Svalbard area 1980–1997
Y:08	F. Cardador <i>et al.</i>	Groundfish surveys in the Atlantic Iberian waters (ICES Divisions VIIIc and IXa): history and perspectives
Y:09	Yu. M. Lepesevich and M.S. Shevelev	Evolution of the Russian survey for demersal fish: from ideal to reality
Y:10	P. Fossum	Spawning stock biomass of Norwegian spring spawning herring (NSSH) backcalculated from larval indices
Y:11	R. Coggan	Designation of fishing areas in the north-east Atlantic for deep-water fisheries surveys
Y:12	J. Rivoirard <i>et al.</i>	A 1D geostatistical analysis on Norwegian spring-spawning herring acoustic data in Ofotfjord (December 1994)
Y:13	J. Rivoirard and N. Bez	A 2D geostatistical analysis of Northern blue whiting acoustic data west of the British Isles
Y:14 Poster	K.R. Patterson <i>et al.</i>	Report of the herring larvae surveys in the North Sea in 1996/1997
Y:15 Poster	A. Lebourges and E. Marchal	Surveying variations of micronekton biomass from mean volume backscattering strength (MVBS) in the Atlantic equatorial current system
Y:16	A. Aglen <i>et al.</i>	Vertical distribution of cod, haddock and redfish; impact on bottom trawl and acoustic surveys in the Barents Sea
Y:17	T. Jakobsen <i>et al.</i>	Norwegian combined acoustic and bottom trawl surveys for demersal fish in the Barents Sea during winter
Y:18	K. Korsbrekke	Norwegian acoustic survey of North East Arctic cod on the spawning grounds off Lofoten
Y:19	Withdrawn	
Y:20	K.H. Nedreaas	Evaluation of the north-east Arctic saithe (<i>Pollachius virens</i>) acoustic survey

Y:21	M. Armstrong <i>et al.</i>	Evaluation of egg production surveys for estimating spawning biomass of demersal fish
Y:22	P. Petitgas and T. Lafont	EVA2: Estimation variance. Version 2. A geostatistical software on Windows 95 the percision of fish stock assessment surveys
Y:23	S.I. Rogers <i>et al.</i>	Description and evaluation of the International Beam Trawl Surveys of the European Continental Shelf
Y:24	A.J.R. Cotter	Can groundfish surveys be improved without breaking the series?
Y:25	Withdrawn	
Y:26 Poster	A. Madirolas <i>et al.</i>	Acoustic, oceanographic and ichthyoplankton surveys on the spawning grounds of the Austral blue whiting (<i>Micromesistius australis</i>) off southern Patagonia, 1994-1996
Y:27	Withdrawn	
Y:28	F. Gerlotto <i>et al.</i>	Effect of meteorological events on the spatial distribution of schools and their typology: impact on the validity of acoustic surveys
Y:29	O. Pálsson <i>et al.</i>	Icelandic groundfish survey
Y:30	F.A. van Beek	Recruitment surveys on juvenile plaice and sole in continental nurseries in the North Sea by the Netherlands
Y:31	H. Heessen <i>et al.</i>	The International Bottom Trawl Survey in the North Sea, the Skagerrak and Kattegat
Y:32	J.J. Hunt	Canadian bottom trawl surveys in the Gulf of Maine and Scotian Shelf areas, 1970-1997
Y:33	T. Azarovitz <i>et al.</i>	The Northeast Fisheries Science Center Bottom Trawl Survey Programme

THEME SESSION ON AQUACULTURE AND GENETICS (AA)

AA:01	G. Nævdal <i>et al.</i>	Esterase variation in herring studied by isoelectric focusing
AA:02	Withdrawn	
AA:03	A. Drenstvig and S.E. Fevolden	Genetic structuring of <i>Pandalus borealis</i> in the North Atlantic I. Allozyme studies
AA:04	L.P. Hansen <i>et al.</i>	The incidence of escaped farmed Atlantic salmon, <i>Salmo salar</i> L., in the Faroese fishery and estimates of catches of wild salmon
AA:05	L.P. Hansen and J.A. Jacobsen	Origin and migration of wild and escaped farmed Atlantic salmon, <i>Salmo salar</i> L., tagged and released north of the Faroe Islands
AA:06	J. Forthun and Mork	J. Genetic variability at isozyme loci in two gadoid species: whiting (<i>Merlangius merlangus</i>) and saithe (<i>Pollachius virens</i>) from the Norwegian coast
AA:07	J. Forthun and Mork	J. Description of polymorphisms at tissue enzyme loci in east Atlantic haddock (<i>Melanogrammus aeglefinus</i>): tissue manifestation, electrophoretic conditions and estimates of basic population genetic parameters
AA:08	M. Héral	Recent evolution of mariculture production in the world: tendencies, main problems, how research answer?

THEME SESSION ON BIOLOGY AND BEHAVIOUR (I) (BB)

BB:01	X Liang and Bjørke	H.	A method to estimate the annual larval production of the Norwegian spring-spawning herring (<i>Clupea harengus</i> L.)
BB:02	R. Sarralde <i>et al.</i>		Temporal and spatial variations on the infestation rates of the oceanic redfish <i>Sebastes mentella</i> (Travin) by the copepod <i>Sphyrion lumpi</i> (Kroyer) in the Irminger Sea
BB:03	T. Raid		Length composition of herring trawl catches in the north-eastern Baltic
BB:04	A.V. Zubchenko <i>et al.</i>		Atlantic salmon from Russian rivers. Fisheries and status of stocks in 1996
BB:05	A.C. Gundersen <i>et al.</i>		Greenland halibut (<i>Reinhardtius hippoglossoides</i> Walbaum) in East-Greenland waters. Longline survey in ICES Division XIVb, July-August 1996
BB:06	S.V. Ivanov		Flounder spawning dynamics in Sub-division 26 of the Baltic Sea
BB:07	G. Rodiuk and O. Shukhgalter		Peculiarities of Baltic herring parastiofauna in the South-Eastern Baltic Sea
BB:08	R.A. Lund <i>et al.</i>		Smolt age and sea age distributions of Atlantic salmon (<i>Salmo salar</i> L.) in the sea north of the Faroe Islands during 1991 to 1995
BB:09	P. Lucio		Biological aspects of mackerel (<i>Scomber scombrus</i> L. 1758) in the Bay of Biscay from the Basque Country catches in the period 1987-1993
BB:10	P. Lucio		Biological aspects of Spanish (Chub) mackerel (<i>Scomber japonicus</i> , Houttuyn, 1782) in the Bay of Biscay from the Basque country catches in the period 1989-1993
BB:11	J.D.M. Gordon and S.C. Swan		The distribution and abundance of deep-water sharks on the continental slope to the west of the British Isles
BB:12	R. Coggan <i>et al.</i>		Notacanthid fishes of the Rockall trough and Porcupine Seabight, west of the British Isles
BB:13	D. Latrouite and P. Noel		Peche de la langouste rouge <i>Palinurus elephas</i> en France. Elements pour fixer une taille marchande
BB:14	M. Kerstan		Annulus completion periods in sardine (<i>Sardinops sagax</i>) otoliths vary with age and year class
BB:15	A. Hylan		Acoustic abundance estimate of 0-group North-East Arctic cod
BB:16	L.V. Scherbich		Diurnal age of juveniles and some peculiarities of turbot (<i>Psetta maxime</i>) distribution in coastal Baltic Sea area adjacent to Kaliningrad region
BB:17	G.G. Thórarinsdóttir		Distribution and abundance of juvenile ocean quahog (<i>Arctica islandica</i>) in Eyjafjörður North Iceland
BB:18	G.G. Thórarinsdóttir		Stock assessment, distribution and population structure of blue mussels (<i>Mytilus edulis</i>) in Hvalfjörður south-west Iceland
BB:19	Withdrawn		
BB:20	T. Haug <i>et al.</i>		Variations in North-East Atlantic minke whale <i>Balaenoptera acutorostrata</i> diets in response to environmental changes

THEME SESSION ON BIOLOGY AND BEHAVIOUR (II) (CC)

CC:01	K.T. Nilssen <i>et al.</i>	Food consumption estimates of Barents Sea harp seals
CC:02	M. Bleil and R. Oeberst	The timing of the reproduction of cod (<i>Gadus Morhua Morhua</i>) in the Western Baltic and adjacent areas
CC:03	V.N. Shibanov <i>et al.</i>	Spatial distribution of deepwater redbfish, <i>Sebastes mentella</i> , in the Irminger Sea: characteristics of biology and habitat conditions
CC:04	J. Pedersen	Preliminary description of swimming activity and estimation of swimming speed of saithe at one location in the North Sea
CC:05	E.I. Alekseeva and F.E. Alekseev	On the problem of study cod maturation rate in the Baltic Sea in relation to spatial differentiation by age-length and physiological conditions
CC:06	Withdrawn	
CC:07	J. Landa and P. Pereda	Growth of white monkfish (<i>Lophius piscatorius</i> , L.) in the Northern Spanish continental shelf (ICES Divisions VIIIc and IXa)
CC:08	A. Gudmundsdottir and B. Steinarsson	Length-weight relationships for several demersal fish species in Icelandic waters
CC:09	J. Sturlaugsson and K. Thorisson	Migratory pattern of homing Atlantic salmon (<i>Salmo salar</i> L.) in coastal waters W-Iceland, recorded by data storage tags
CC:10	G.B. Stenson and B. Sjare	Seasonal distribution of harp seals, <i>Phoca groenlandica</i> , in the Northwest Atlantic
CC:11	J.-E. Eliassen <i>et al.</i>	Variation in the biomass of cod and haddock along the Kola Peninsula in relation to the hydrological regime
CC:12	Withdrawn.	
CC:13	G. Kraus and <i>et al.</i>	Intra- and interannual variability in fecundity of Baltic cod
CC:14	J. S. Christiansen <i>et al.</i>	Reproductive traits of marine fish in relation to their mode of oviposition and zoogeographic distribution
CC:15	O. Bjelland and T. Monstad	Blue whiting in the Norwegian sea, spring and summer 1995 and 1996
CC:16	I. Huse <i>et al.</i>	Dynamics of wintering Norwegian spring-spawning herring at the entrance of Tysfjorden, December 1996
CC:17	A. Slotte and A. Johannessen	Spawning of Norwegian spring spawning herring (<i>Clupea harengus</i> L.) related to geographical location and population structure
CC:18	J. Sturlaugsson <i>et al.</i>	The food of homing Atlantic salmon (<i>Salmo salar</i> L.) during spawning migration in coastal waters W-Iceland
CC:19	G. Maack	Aspects of the reproductive cycle of <i>Encrasicholina punctifer</i> Fowler, 1938, from West-Sumatra, Indonesia
CC:20	J. Tomkiewicz <i>et al.</i>	Maturity ogives and sex ratio for Baltic cod: establishment of a database and time series

THEME SESSION ON ASSESSMENT METHODS (DD)

DD:01	B.I. Berenboim and V.A. Korzhev	On possibility to apply the Stefánsson stock production model for assessment of shrimp (<i>Pandalus borealis</i>) stock in the Barents Sea
DD:02	D.K. Stevenson, K. Friedland and M. Armstrong	Managing the US Atlantic herring coastal stock complex for long-term sustainable yield
DD:03	V. Trujillo <i>et al.</i>	Factors affecting discards by the coastal Spanish North Atlantic trawlers
DD:04	Withdrawn	
DD:05	H. Gislason and H. Lassen	On the linear relationship between fishing effort and the slope and of the size spectrum
DD:06	T. Grubbe and H. Gislason	Changes in length at age of North Sea whiting, 1980-1995
DD:07	K.R. Patterson	Density-dependence of growth and maturity in the Norwegian spring-spawning herring, and implications for yield calculations
DD:08	K.R. Patterson	Evaluation of uncertainty in stock assessment, biological reference points, and outcome of a harvest control law where model structure is uncertain, using a Bayesian method: Norwegian spring-spawning herring
DD:09	O. Maury <i>et al.</i>	Estimating fish numbers, fishing mortality and migration rates between different spatial zones: the spatial VPA methodology
DD:10	þ. Sigurðsson and G. Stefánsson	An assessment of a long-lived redfish species, <i>Sebastes marinus</i> , in Boreal waters

THEME SESSION ON ENVIRONMENTAL FACTORS (EE)

EE:01	M Kerner	Interactions between local oxygen deficiencies and heterotrophic microbial processes in the Elbe Estuary
EE:02	T. Drevs	Relationship between salinity and Baltic flounder (<i>Platichthys flesus</i> (L.)) migration in Estonian waters
EE:03	H. Ojaveer and Lankov	A. Adaptation of eelpout, <i>Zoarces viviparus</i> (L.), to spatially changing environment on the coastal slope of the Gulf of Riga (Baltic Sea)
EE:04	E. Nielsen	Influence of the environment on the sole (<i>Solea solea</i>) recruitment in the Kattegat. Preliminary results
EE:05	A. Corten	North/south displacement of herring in the northeastern North Sea in response to extreme winter temperatures
EE:06	O.T. Albert <i>et al.</i>	Recent variation in recruitment of Northeast Atlantic Greenland halibut (<i>Reinhardtius hippoglossoides</i>) in relation to physical factors
EE:07	A. Orłowski <i>et al.</i>	Polish acoustic survey on pelagic fish distribution in ICES subdivisions 24, 25 and 26 in the Baltic Sea carried out in October 1996
EE:08	T. Gytte	A simple system for recording time series of data from a mobile platform as a function of its position
EE:09	W.R. Turrell <i>et al.</i>	Ocean climate conditions in the ICES North Atlantic Region 1996/97
EE:10	E.M. Karasoova <i>et al.</i>	Peculiarities of cod eggs distribution in 1992-1995 in relation to hydrographic conditions in the South-Eastern Baltic Sea
EE:11 (video)	N.C. Eno <i>et al.</i>	A study on the effects of crustacean traps on the benthos
EE:12	O.A. Misund <i>et al.</i>	Migration behaviour of herring along the cold front in the Norwegian Sea in April 1995-1997
EE:13	H. Dornheim <i>et al.</i>	On the occurrence of young cod and herring in different water masses of the southeastern North Sea during early summer 1996
EE:14	V.L.L. Filipe	The Angola domain as observed in 1996
EE:15	K. Sherman	A modular approach to the monitoring and assessment of large marine ecosystems
EE:16	J.S. Burke <i>et al.</i>	Tidal regime and early life history patterns of flounders

THEME SESSION ON FISHERIES TECHNOLOGY (FF)

FF:01	N. Madsen <i>et al.</i>	Experiments with contrast colours and estimates of the selectivity in window codends fished in the Baltic Sea cod (<i>Gadus morhua</i>) fishery
FF:02	J. R. Nielsen <i>et al.</i>	<i>Ex-situ</i> TS measurements on juvenile cod
FF:03	Withdrawn	
FF:04	J. Boje <i>et al.</i>	Gillnet selectivity in the fishery for Greenland halibut in East Greenland
FF:05	E. Pikitch <i>et al.</i>	Practical applications of fishing and handling techniques in estimating the mortality of discarded trawl-caught Pacific halibut (<i>Hippoglossus stenolepis</i>)
FF:06	D. Erickson <i>et al.</i>	Survival of trawl caught and discarded sablefish (<i>Anoplopoma fimbria</i>) off the U.S. West Coast
FF:07	T. Mukai and K. G. Foote	On the depth dependence of fish target strength
FF:08	H. Wienbeck	First trials on the selection of a sorting grid in the commercial fishery for brown shrimps
FF:09	Withdrawn	
FF:10	W. Thiele <i>et al.</i>	Flow measurements in a cod-end
FF:11	T. Knutsen and K. G. Foote	Experiences in making acoustic measurements in a mesocosm with <i>Calanus finmarchicus</i>
FF:12	L. Calise <i>et al.</i>	Morphometry of <i>Calanus finmarchicus</i>
FF:13 Poster	K. G. Foote <i>et al.</i>	Abundance estimation of Norwegian spring-spawning herring wintering in the Vestfjord system, December 1996
FF:14	A. V. Soldal and I. Huse	Selection and mortality in pelagic longline fisheries for haddock
FF:15	K. G. Foote <i>et al.</i>	Adventures in measuring the density of <i>Calanus finmarchicus</i>

THEME SESSION ON TROPHIC RELATIONSHIPS (GG)

GG:01	L.P. Folkow <i>et al.</i>	Estimated food consumption of minke whales <i>Balaenopera acutorostrata</i> in the northeast Atlantic waters in 1992-1995
GG:02	K. Kilongo and S. Mehl	Predation by Bengala hake (<i>Merluccius polli</i>) on commercially exploited shrimps (<i>Parapenaeus longirostris</i> and <i>Aristeus varidens</i>) in Angolan waters
GG:03	O.V. Gerasimova	Analysis of king crab (<i>Paralithodes camtschatica</i>) trophic links in the Barents Sea
GG:04	A.V. Dolgov	Distribution, abundance, biomass and feeding of thorny skate (<i>Raja radiata</i>) in the Barents Sea
GG:05	T.A. Gorelova	Feeding of immature redfish in the Greenland shelf area
GG:06	F.A. Patokina and N.A. Kalinina	Ecology of Baltic cod feeding and its place in the trophic system of the Baltic Sea
GG:07	Withdrawn	
GG:08	Withdrawn	

POSTER SESSION

HH:01	W.J. Mc Curdy and E. Moksness	The establishment of EFAN - the European network of fish ageing laboratories
HH:02	K. Wieland and A. Makarchouk	Comparison of the efficiency of Bongo and IKS-80 nets for sampling Baltic cod eggs
HH:03	G. Blanco <i>et al.</i>	Genetic differences in a sibling group of Atlantic salmon juveniles, related with differences in their timing at first feeding, fork length and weight
HH:04	G. Blanco <i>et al.</i>	Genetic base of age at maturity in <i>Salmo salar</i> : preliminary results
HH:05	N.V. Dolgova and A.V. Dolgov	Stock status and predation of long rough dab (<i>Hippoglossoides platessoides</i>) in the Barents and Norwegian Seas
HH:06	F.A. Patokina and N.A. Kalinina	Trophic relations of abundant pelagic fishes in the Baltic Sea
HH:07	C.M. Waluda and G.J. Pierce	Squid distribution and abundance in relation to oceanographic conditions
HH:08	Withdrawn	
HH:09	V. Zdanowicz <i>et al.</i>	Microconstituent concentrations in fish otoliths
HH:10	R. Coggan and A. Newton	A format for the exchange and archiving of fisheries survey data, with particular reference to deep-water fisheries
HH:11	A. Newton and R. Coggan	SAMMAR list of codes: a hierarchical, numeric coding system for fish and invertebrate species of the North-east Atlantic and Mediterranean
HH:12	T. Johansen and <i>et al.</i>	Genetic characterisation of Giant <i>Sebastes</i> along the Reykjanes Ridge
HH:13	T. Johansen <i>et al.</i>	Studies on the relationship between deep-sea and oceanic <i>Sebastes mentella</i> in the Irminger Sea by the use of haemoglobin, allozyme analyses and RAPD
HH:14	D.N. Mac Lennan and E.J. Simmonds	Detection of fish close to the seabed
HH:15	C. Ulrich and D. Gascuel	English Channel fisheries: a complex multifleet-multispecies dynamic to be modeled
HH:16	Withdrawn	
HH:17	Withdrawn	
HH:18	T. Monstad and S.V. Belikov	Review of the blue whiting investigation by Norway and Russia in the Northeast Atlantic
HH:19	J.B. Peleteiro <i>et al.</i>	Study of reproduction in captivity of blackspot sea bream (<i>Pagellus bogaraveo</i> B.) Embryonic development and consumption of vitelline sac
HH:20	O.A. Bergstad <i>et al.</i>	Exploitation and biology of ling, blue ling and tusk in the north-east Atlantic
HH:21	T.G. Vasilieva	Variations of age structure and spatial distribution of sprat aggregations in ICES Subdivisions 26 and 28 of the Baltic Sea
HH:22	R.P. Sánchez <i>et al.</i>	The reproductive biology of the patagonian sprat (<i>Sprattus</i>

		<i>fuagensis</i>); several facts and still some speculations
HH:23	R. Ercoli <i>et al.</i>	Selectivity experiences on hake (<i>Merluccius hubbsi</i>) by means the use of a single grid sorting device for the escape of juveniles fishes in trawls (DEJUPA)
HH:24	A. Eltink	Horse mackerel otolith exchange in 1996
HH:25	M. McAliskey and R.P. Briggs	Hematodinium in Irish Sea <i>Nephrops</i>
HH:26	N. Mcquid <i>et al.</i>	Estimation of <i>Nephrops</i> biomass in the Irish Sea
HH:27	Withdrawn	
HH:28	Withdrawn.	