

Contributions to the 1999 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 Sweden 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 1998/1999
- Gen:3 Elections and Appointments of Council Officials at 1999 Annual Science Conference (87th Statutory Meeting) (E+F)
- Gen:4 Report of the Bureau Working Group on Strategic Planning
- Gen:5 Report on ICES Symposia
- Gen:6 1998/1999 Overview of ICES Committees and Subsidiary Groups and their Shadowing by Secretariat Staff, and Schedule of ICES Meetings and List of CM Codes

DEL - DELEGATES DOCUMENTS

- Del:1 Final Accounts for Financial Year 1997/1998
- Del:2 Preliminary Report on Administration
- Del:3 Possible Change of ICES Financial and Operational Year to Run from 1 January to 31 December
- Del:4 Estimated Accounts for Financial Year 1998/1999
- Del:5 Budget for Financial Year 1999/2000
- Del:6 Forecast Budget for Financial Year 2000/2001
- Del:7 Elections and Appointments of Council Officials at the 1999 Annual Science Conference (87th Statutory Meeting)
- Del:8 Appointment of New General Secretary
- Del:9 Elections/Appointments of New Chairs of ACFM and ACME
- Del:10 Report on Accession Process of Lithuania to ICES Convention
- Del:11 Swedish Proposal to Modify the Existing System for Calculating Member Countries' Contributions to ICES
- Del:12 Application by BirdLife International for Observer Status
- Del:13 Progress on Planning and Funding for the ICES Centenary
- Del:14 Report of 19 March 1999 Meeting between ICES Secretariat, and Permanent Secretaries and Delegates from Sweden, Norway and Denmark Concerning ICES Centenary Arrangements
- Del:15 Note Regarding Press Matters for ICES Centenaries
- Del:16 Developing and Agreed Memoranda of Understanding
- Del:17 Report of 25-26 February 1999 Meeting of Joint ICES/Commissions Working Group on Cooperative Procedures
- Del:18 Arrangements for 2000 (88th Statutory Meeting; Belgium), 2001 (89th Statutory Meeting; Norway), and Subsequent Annual Science Conferences
- Del:19 1999 Mid-Term Report by ICES Historian on Book Project and Budget Proposal for 1999/2000
- Del:20/Gen:4 Report of 1999 Meeting of Bureau Working Group on Strategic Planning
- Del:21 Report of 1999 Meeting of Coordinating Group on ICES Advice
- Addendum to
Del:21 Options for Changing the ICES Advisory Structure
- Del:22 1999 Mid-Term Report on Status of ICES/GLOBEC Project Office
- Del:23 Progress with GEF Baltic Sea Regional Project
- Del:24 Possible Establishment of Conference Fee for ICES Annual Science Conference
- Del:25 Actions Following 11th Dialogue Meeting
- A:5 Report of 1999 Mid-Term Meeting of Consultative Committee

FI - FINANCE COMMITTEE

Fi:1* Agenda for Finance Committee

PUB - PUBLICATION COMMITTEE

Pub:1 Agenda for Publications Committee
Pub:2 Review of ICES Publication Activities in 1998/1999
Pub:3 *ICES Journal of Marine Science*: Editors' Report for 1998/1999
Pub:4 *ICES Journal of Marine Science*: Academic Press Publisher's Report for 1998/1999
Pub:5 *ICES Cooperative Research Report* series: Editor's Report for 1998/1999
Pub:6 *ICES Identification Leaflets for Plankton*: Editor's Report for 1998/1999
Pub:7 *ICES Identification Leaflets for Diseases and Parasites of Fish and Shellfish*:
Editor's Report for 1998/1999
Pub:8 *ICES Techniques in Marine Environmental Sciences*: Editor's Report for 1998/1999
Pub:9 Report on the Secretariat's Response to Publication Matters Raised by the Committee
during the 1998 ASC, with Two Annexes

* For Finance Committee and Delegates only

CONSULTATIVE COMMITTEE

- A:1 Agenda for Consultative Committee
- A:2 Minutes from ACFM Meeting 26–29 October 1998
- A:3 Minutes from ACFM Meeting 17–20 May 1999
- A:4 Minutes from ACME Meeting 31 May to 5 June 1999
- A:5 Report of Mid-Term Meeting of the Consultative Committee and the ASC
Programme Planning Group 8-11 June 1999
- A:6 Compendium of Draft Recommendations

FISHERIES TECHNOLOGY COMMITTEE

- B:1 Working Group on Fishing Technology and Fish Behaviour (WGFTFB)
- B:2 Working Group on Fisheries Acoustics Science and Technology (WGFAST)
- B:3 Joint Session of Working Group on Fishing Technology and Fish Behaviour and Working Group on Fisheries Acoustics Science and Technology (WGFTFB and WGFAST)
- B:4 Study Group on Methods for Measuring the Selectivity of Static Gear (SGMMG)

REFERENCE PAPERS: G:2, H:7

OCEANOGRAPHY COMMITTEE

C:1	ICES/GLOBEC North Atlantic Regional Coordination Group (RCG)
C:2 Ref. G	Working Group on Recruitment Processes (WGRP)
C:3 Ref. ACME	Working Group on Phytoplankton Ecology (WGPE)
C:4 Ref. ACME	ICES/IOC Working Group on Harmful Algal Bloom Dynamics (WGHABD)
C:5 Ref. ACME, E	Working Group on Seabird Ecology (WGSE)
C:6 Ref. ACME	Working Group on Zooplankton Ecology (WGZE)
C:7 Ref. ACME	Working Group on Marine Data Management (WGMDM)
C:8 Ref. ACME	Working Group on Oceanic Hydrography (WGOH)
C:9 Ref. ACME	Working Group on Shelf Seas Oceanography (WGSSO)
C:10	ICES/GLOBEC Working Group on Cod and Climate Change (WGCCC)
C:11	Steering Group on the Global Ocean Observing System (SGGOOS)
C:12	Steering Group for the ICES/GLOBEC North Atlantic Regional Office (SGNARO)
C:13 (cancelled) Ref. ACME	Study Group on an ICES/IOC Checklist of Phytoplankton (SGPHYT) (no report)
C:14 Ref. ACFM, ACME	Workshop on GOOS (WKGOOS)
C:15 Ref. ACFM, D, G	Workshop on Gadoid Stocks in the North Sea during the 1960s and 1970s, the Fourth ICES/GLOBEC Backward-Facing Workshop (WK6070)

REFERENCE PAPERS: E:1, E:2, ACME:3, ACME:4, ACME:5, ACME:6

RESOURCE MANAGEMENT COMMITTEE

- D:1 Comprehensive Fishery Evaluation Working Group (WGCOMP)
Ref. ACFM
- D:2 Ref. International Bottom Trawl Survey Working Group (IBTSWG)
ACFM, G
- D:3 Planning Group on Surveys on Pelagic Fish in the Norwegian Sea (PGSPFN)
Ref. ACFM
- D:4 Study Group to Evaluate the Effects of Multispecies Interactions (SGEEMI)
Ref. ACFM, G
- D:5 Study Group on the Management Performance of Fisheries Systems (SGMPFS)
- D:6 Workshop on the Evaluation of the Plaice Box (WKEPB)
- D:7 Ref. G International Bottom Trawl Survey in the North Sea, Skagerrak and Kattegat in
recoded as D:2 1996: Quarter 2, 3 and 4
Addendum 1
- D:8 Ref. G International Bottom Trawl Survey in the North Sea, Skagerrak and Kattegat in
recoded as D:2 1998: Quarter 1
Addendum 2

REFERENCE PAPERS: C:15, G:5, G:7, G:8, H:1, H:3, ACFM:23

MARINE HABITAT COMMITTEE

- E:1 Benthos Ecology Working Group (BEWG)
Ref. ACME, C
- E:2 Marine Chemistry Working Group (MCWG)
Ref. ACME, C
- E:3 Working Group on Biological Effects of Contaminants (WGBEC)
Ref. ACME
- E:4 Working Group on Environmental Assessment and Monitoring Strategies (WGEAMS)
Ref. ACME
- E:5 Working Group on the Effects of Extraction of Marine Sediments on the Marine Ecosystem (WGEXT)
Ref. ACME
- E:6 Working Group on Marine Mammal Habitats (WGMMHA)
Ref. ACME
- E:7 Working Group on Marine Sediments in Relation to Pollution (WGMS)
Ref. ACME
- E:8 Working Group on Statistical Aspects of Environmental Monitoring (WGSAEM)
Ref. ACME
- E:9 Joint Meeting of the Working Group on Biological Effects of Contaminants and the Working Group on Statistical Aspects of Environmental Monitoring (JBSAEM)
Ref. ACME
- E:10 Study Group on Marine Habitat Mapping (SGMHM) (progress report)
- E:11 Study Group on Marine Biodiversity (SGMB) (progress report)

REFERENCE PAPERS: C:5, F:2, F:4, G:3, G:6, G:12, ACME:1, ACME:2, ACME:3, ACME:4, ACME:5, ACME:7, ACME:8

MARICULTURE COMMITTEE

- F:1 Working Group on the Application of Genetics in Fisheries and Mariculture (WGAGFM)
- F:2 Working Group on Environmental Interactions of Mariculture (WGEIM)
Ref. ACME, E
- F:3 Working Group on Marine Fish Culture (WGMAFC) (postponed) (progress report)
- F:4 Working Group on Pathology and Diseases of Marine Organisms (WGPDMO)
Ref. ACFM,
ACME, E

REFERENCE PAPERS: ACME:1

LIVING RESOURCES COMMITTEE

- G:1 Stock Identification Methods Working Group (SIMWG)
- G:2 Working Group on *Crangon* Fisheries and Life History (WGCRAN)
Ref. ACFM, B
- G:3 Ref. Working Group on Marine Mammal Population Dynamics and Trophic Interactions
ACFM, (WGMMPD)
ACME, E
- G:4 Working Group on Cephalopod Fisheries and Life History (WGCEPH)
- G:5 Working Group on Mackerel and Horse Mackerel Egg Surveys (WGMEGS)
Ref. D
- G:6 Working Group on Beam Trawl Surveys (WGBEAM)
Ref. ACFM, E
- G:7 Planning Group for Herring Surveys (PGHERS)
Ref. D
- G:8 Planning Group for Pelagic Acoustics Surveys in ICES Sub-Areas VIII and IX (PGPAS)
Ref. D
- G:9 Study Group on Redfish Stocks (SGRS)
- G:10 Study Group on Sea Trout (SGSTR)
- G:11 Study Group on Elasmobranch Fishes (SGEF)
Ref. ACFM
- G:12 Study Group on the Biology and Life History of Crabs (SGCRAB)
Ref. E
- G:13 Study Group on Life History of *Nephrops* (SGNEPH)
Ref. ACFM
- G:14 Workshop on Otolith Ageing of North Sea Whiting (WKOAW)
- G:15 Workshop on the Usefulness of Scale Growth Analyses and Other Measures of Condition in Salmon (WKUS)
- G:16 Horse Mackerel Otolith Workshop (WKHMO)

REFERENCE PAPERS: C:2, C:15, D:2, D:4, ACFM:2, ACFM:5, ACFM:10

BALTIC COMMITTEE

H:1 Ref. D	Baltic International Fish Survey Working Group (WGBIFS)
H:2	Baltic Herring Age-Reading Study Group (BHARSG)
H:3 Ref. D	Study Group on Baltic Acoustic Data (SGBAD)
H:4	Study Group on Baltic Cod Age Reading (SGBCAR)
H:5 Ref. ACFM	Study Group on Multispecies Model Implementation in the Baltic (SGMMIB)
H:6	Second Scale-Reading Workshop on Baltic Salmon (SSRWBS)
H:7 Ref. B	Workshop on Baltic Trawl Experiments (WKBTE)

REFERENCE PAPERS: ACFM:22, ACME:3, ACME:4, ACME:5, ACME:8

ACFM

ACFM:1	Working Group on the Assessment of Northern Shelf Demersal Stocks (WGNSDS)
ACFM:2 Ref. G	Study Group on the Assessment of Other Fish and Shellfish Species (SGASSO)
ACFM:3	Arctic Fisheries Working Group (AFWG)
ACFM:4	Working Group on the Assessment of Southern Shelf Demersal Stocks (WGSSDS)
ACFM:5 Ref. G	<i>Pandalus</i> Assessment Working Group (WGPAND)
ACFM:6	Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine and Anchovy (WGMHSA)
ACFM:7	Joint ICES/NAFO Working Group on Harp and Hooded Seals (WGHARP)
ACFM:8	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK)
ACFM:9	Study Group on Future Requirements for Fisheries Assessment Data and Software (SGFADS)
ACFM:10 Ref. G	Study Group on IIIa Herring (SG3AH)
ACFM:11	Study Group on Multiannual Assessment Procedures (SGMAP)
ACFM:12	Herring Assessment Working Group for the Area South of 62°N (HAWG)
ACFM:13	Working Group on <i>Nephrops</i> Stocks (WGNEPH)
ACFM:14	Working Group on North Atlantic Salmon (WGNAS)
ACFM:15	Baltic Fisheries Assessment Working Group (WGBFAS)
ACFM:16	Baltic Salmon and Trout Assessment Working Group (WGBAST)
ACFM:17	North-Western Working Group (NWWG)
ACFM:18	Northern Pelagic and Blue Whiting Fisheries Working Group (WGNPBW)
ACFM:19	Study Group on Effects of Sandeel Fishing (SGESF)
ACFM:20	Joint ICES NAFO Working Group on Harp and Hooded Seals (WGHARP)
ACFM:21	Study Group on the Biology and Assessment of Deep-Sea Fisheries Resources (SGDEEP)
ACFM:22 Ref. H	Study Group on Baltic Herring Maturity (SGBHM)
ACFM:23 Ref. D	Study Group on Market Sampling Methodology (SGMSM)
ACFM:24	Joint Meeting of Eurostat Working Group "Fishery Statistics". ICES <i>Ad Hoc</i> Working Group of National Statistical Correspondents
ACFM:25	Workshop on Standard Assessment Tools for Working Groups

REFERENCE PAPERS: C:14, C:15, D:1, D:2, D:3, D:4, F:4, G:2, G:3, G:6, G:11, G:13, H:5

ACME

ACME:1 Ref. E, F	Working Group on Introductions and Transfers of Marine Organisms (WGITMO)
ACME:2 Ref. E	ICES/IOC/IMO Study Group on Ballast Water and Sediments (SGBWS)
ACME:3 Ref. C, E, H	ICES/HELCOM Steering Group on Quality Assurance of Biological Measurements in the Baltic Sea (SGQAB)
ACME:4 Ref. C, E, H	ICES/HELCOM Steering Group on Quality Assurance of Chemical Measurements in the Baltic Sea (SGQAC)
ACME:5 Ref. C, E, H	ICES/OSPAR Steering Group on Quality Assurance of Biological Measurements Related to Eutrophication Effects (SGQAE)
ACME:6 Ref. C	Second ICES/HELCOM Workshop and Training Course on Phytoplankton (WKPHYT)
ACME:7 Ref. E	Workshop on Biological Effects of Methods to be applied to detects ‘Combined Effects’ in Marine Ecosystem (WKCEME)
ACME:8 Ref. E, H	ICES/HELCOM Workshop on Baltic Sea Sediments: Conditions and Contaminants (WKBSSED)

REFERENCE PAPERS: C:3, C:4, C:5, C:6, C:7, C:8, C:9, C:13, C:14, E:1, E:2, E:3, E:4, E:5, E:6, E:7, E:8, E:9, F:2, F:4, G:3

**Plans for Major International Programmes in the North Atlantic Region over the Next Decade:
Should ICES Be Involved? (Mini)**

Mini:01	H. Dahlin	GOOS – The Global Ocean Observing System: How ICES might participate as well as benefit as a customer of GOOS products
Mini:02	J. Meincke	CLIVAR – The climate variability and predictability study and its implications for understanding fish stock variability
Mini:03	W.S. Wooster	PICES – Major international programs in an ICES analog
Mini:04	H. Enevoldsen and P. Gentien	Not received
Mini:05	P. Liss	Not received
Mini:06	J. Steele	GLOBEC and regime shifts - the environmental context on marine fisheries
Mini:07	Withdrawn	

**THEME SESSION ON APPLICATION OF ACOUSTIC TECHNIQUES TO BOTTOM
TRAWL SURVEYS: (J)**

J:01		Withdrawn
J:02	D.G. Reid, P.J. Copland, and I. Garioch	Not received
J:03		Withdrawn
J:04	B.E. Axelsen	<i>In situ</i> TS of cape horse mackerel (<i>Trachurus capensis</i>)
J:05	O.R. Godø and E. Ona	Changes in acoustic abundance – a signal indicator for stock dynamics of cod (<i>Gadus morhua</i>)
J:06	V. Hjellvik and O.R. Godø, and D. Tjøstheim	Modelling diurnal variation in bottom trawl catches and potential application in surveys
J:07	K. Korsbrekke, S. Mehl, O. Nakken, and M. Pennington	Acoustic and bottom trawl surveys: How much information do they provide for assessing the northeast Arctic cod stock?
J:08	K. Michalsen, A. Aglen, D. Somerton, I. Svellingen, and J.T. Øvredal	Quantifying the amount of fish unavailable to bottom trawl by use of an upward-looking transducer
J:09	J.T. Øvredal and I. Huse	Observation of fish behaviour, density and distribution around a surveying vessel by means of a deployable echo sounder system
J:10	O.R. Godø, D. Somerton, and A. Totland	Fish behaviour during sampling as observed from free floating buoys – application for bottom trawl survey assessment
J:11	I. McQuinn, Y. Simard, T.W.F. Stroud, J.-L. Beaulieu, B. McCallum and S. Walsh	An adaptive integrated acoustic-trawl survey on Atlantic cod
J:12	S. Cachera, J. Massé, and Y. Vérin	How the use of acoustics during bottom trawl surveys may provide more accurate abundance indices: an application for IBTS surveys carried out in the southern North Sea
J:13	E. Ona	Determining the entrance position of fish in trawls
J:14		Withdrawn
J:15	V.M. Vorobyov, S.M. Kasatkina, and V.A. Severin	Experimental practice of cod biomass assessment in ICES Sub-division 26 of the Baltic Sea based on trawling acoustic surveys in 1997 and 1998
J:16 Poster	E.J. Simmonds, M. Bailey, R. Toresen, E. Torstensen, J. Pedersen, E. Götze, P. Fernandes, and A.S. Couperus	Not received

THEME SESSION ON APPLICATION OF COUPLED BIO-PHYSICAL MODELS IN STUDIES OF ZOOPLANKTON AND ICHTHYOPLANKTON ADVECTION AND DISPERSION: (K)

K:01	W. Fennel	On the integration of zooplankton dynamics into circulation models
K:02		Withdrawn
K:03	B. Ådlandsvik, A.C. Gundersen, K.H. Nedreaas, A. Stene, and O.T. Albert	Modelling the advection and diffusion of eggs and larvae of northeast Arctic Greenland halibut
K:04		Withdrawn
K:05	N.L. Shackell, K.T. Frank, Brian Petrie, D. Brickman and J. Shore	Dispersal of early life stage haddock (<i>Melanogrammus aeglefinus</i>) as inferred from the spatial distribution and variability in length-at-age of juveniles
K:06	B.J. Rothschild	Initial conditions for dynamical productivity models
K:07	L.S. Incze, F.E. Werner, N. Wolff, and F. Dye	Direct and indirect effects of wind-induced turbulence on larval cod feeding: results of a 1-D model for Georges Bank
K:08	D.R. Lynch, C.E. Naimie, F.E. Werner, D. McGillicuddy, J. Manning, R.A. Luettich Jr, B. Blanton, C. Lewis, C. Davis, R.G. Lough, and C. Flagg	Not received
K:09	F.E. Werner, D. McGillicuddy, D.R. Lynch, C.E. Naimie, C.F. Lewis, J. Manning, B.O. Blanton, R.A. Luettich Jr, R.G. Lough, C. Davis, and C. Flagg	Not received
K:10	D. Brickman, K.T. Frank, and N.L. Shackell	Early life stage modelling of Browns bank haddock (<i>Melanogrammus aeglefinus</i>)
K:11		Withdrawn
K:12 Poster	E.M. Acha, M. Pájaro, and R.P. Sánchez	The reproductive response of clupeoid fishes to different physical scenarios. Three study cases in the Southwest Atlantic

THEME SESSION ON NORDIC SEAS EXCHANGES (L)

L:01	W.R. Turrell, B. Hansen, S. Østerhus, S. Hughes, K. Ewart, and J. Hamilton	Direct observations of inflow to the Nordic Seas through the Faroe Shetland Channel 1994–1997
L:02	S.R. Dye, G.R. Bigg, and W.R. Turrell	Variability of flow through the Faroe-Shetland Channel
L:03	K.A. Mork and L. Asplin	Temperature and salinity fluctuations in the Norwegian Sea in relation to wind
L:04	A.P. Pedchenko	Not received
L:05	R. Ingvaldsen, L. Asplin, and H. Loeng	Short time variability of the Atlantic inflow to the Barents Sea
L:06	S. Jónsson	The circulation in the northern part of the Denmark Strait and its variability
L:07	O.B. Titov	Influence of water exchange in the Barents Sea on the long-term variability in density in the Kola section
L:08		Withdrawn
L:09	G. Budéus, G. Krause, S. Ronski, and A. Watson	Deep water warming and exchange in the Greenland Sea during the recent period of marginal winter convective activity
L:10	I.H. Harms, J.O. Backhaus, and D. Hainbucher	Modelling the seasonal variability of circulation and hydrography in the Iceland-Faroe-Shetland overflow area
L:11	M. Prange and R. Gerdes	Influence of Arctic river runoff on the circulation in the Arctic Ocean, the Nordic Seas, and the North Atlantic
L:12	F. Kauker, R. Gerdes, and C. Koeberle	Propagation of temperature and salinity anomalies in the Nordic Seas as derived from a multidecadal OGCM simulation
L:13	S.-Aa. Malmberg, J. Mortensen, and H. Valdimarsson	Decadal-scale climate and hydro-biological variations in Icelandic waters in relation to large-scale ocean-atmospheric conditions in the northern North Atlantic
L:14	S.-Aa. Malmberg and J. Désert	Hydrographic conditions in North Icelandic waters and annual air temperature in Iceland
L:15	S.-Aa. Malmberg and H. Valdimarsson	Satellite tracked surface drifters and "Great Salinity Anomalies" in the Subpolar Gyre and the Norwegian Sea
L:16	J. Mortensen and H. Valdimarsson	Thermohaline changes in the Irminger Sea
L:17	J. Verduin, R. Woodgate, E.J. Fahrbach, J. Meincke, S. Østerhus, U. Schauer, and V. Tverberg	Direct measurements of volume transports across Fram Strait
L:18	M. Karcher, J. Brauch, B. Fritsch, R. Gerdes, F. Kauker, C. Koeberle, and M. Prange	Variability in the Nordic Seas exchange – Model results 1979-1993
L:19	S. Østerhus, B. Hansen, R. Kristiansen, P. Lundberg, I. Lake, and K. Borenäs	The deep overflow through the Faroe Bank Channel
L:20	S. Østerhus and T. Vinje	Not received

- L:21 B. Hansen, S. Østerhus, and R. Kristiansen and K.M.H. Larsen The Iceland-Faroe inflow of Atlantic water to the Nordic Seas
- L:22 Withdrawn
- L:23 Bert Rudels, E. Fahrbach, and J. Meincke The east Greenland Current from Fram Strait to beyond Denmark Strait in 1998: Observations from R/V Polarstern and R/V Valdivia
- L:24 J. Blindheim Wind driven decadal fluctuations in water mass structure in the Nordic Seas
- L:25 R. Gerdes, C. Koeberle, and F. Kauker Mechanisms determining Fram Strait ice export variability
- L:26 V.L. Buehler, C. Clemmesen, and E. Svendsen Growth of Atlantic herring larvae (*Clupea harengus* L.) in response to climatic long term trends (NAO) and to hydrographical features in the Northern North Sea in the period 1990-1997
- L:27 Irene Lake, Karin Borenäs, and Peter Lundberg, On the occurrence of an intermediate water mass in the Faroe-Bank Channel
- L:28 J. Brauch, R. Gerdes, and M. Karcher Response experiments with NAO related forcing
- L:29 K.A. Orvik, Ø. Skagseth, P. Jaccard, and M. Mork Atlantic inflow to the Nordic Seas. Volume fluxes and structure from long-term current measurements in the Svinøy section
- L:30 Ø. Skagseth, K.A. Orvik, and M. Mork On the heat flux associated with the Norwegian Atlantic current
- L:31 Withdrawn
- L:32 J. Piechura and W. Walczowski Exchanges between the Norwegian Sea and the Greenland Sea. (No Poster paper)
- L:33 I.H. Harms, J.O. Backhaus, and D. Hainbucher The circulation in the EU-TASC region during the "Calanus years" 1996/1997 (No paper)

THEME SESSION ON 4-D SAMPLING OF THE OCEANS AT MICRO- TO MESOSCALES (M)

M:01	P.G. Fernandes and A.S. Brierley	Using an Autonomous Underwater Vehicle as a platform for mesoscale acoustic sampling in marine environments
M:02	D.V. Holliday	Not received
M:03	O.A. Misund, K.A. Orvik, B. Hoddevik, and L. Nøttestad	Influence of sea temperature on herring distribution and migration in the Norwegian Sea in April 1997
M:04		Withdrawn
M:05	D.M. Checkley Jr, L. Motos, A. Uriarte, M. Santos, M. Trivedi, and S. Iwamoto	Continuous, underway sampling of pelagic fish eggs and the environment: The Bay of Biscay anchovy and machine vision research
M:06	D.S. Cabell, M.C. Benfield, Peter H. Wiebe, S.M. Gallager, T.K. Stanton, and C.H. Green	Real time image analysis: instrument to model
M:07	P.H. Wiebe, T.K. Stanton, Charles H. Greene, M. Benfield and T. Austin	BIOMAPER II: an integrated instrument platform for coupled biological and physical measurements in coastal and oceanic regimes
M:08	J.F. Grassle and S. Glenn	Not received

THEME SESSION ON MANAGEMENT AND MITIGATION FOR HARMFUL ALGAE (N)

N:01	D.M. Anderson	Monitoring and management of harmful algal blooms: A global perspective
N:02	S.N. Semionova	Toxic phytoplankton of the Pregola-Vistula Lagoon estuary system
N:03		Withdrawn
N:04	A.-S. Rehnstam-Holm, L. Edebo, J. Haamer, O. Lindahl, B. Hernroth, and F. Norén	Diarrhetic shellfish toxins (DST) in mussels along the Swedish west coast
N:05	E. Dahl and K. Tangen	The life with harmful algae in Norway – management
N:06	J. Haamer, J. Rodhe, and F. Norén	Possibilities to change harmful algae community to less harmful with mussel (<i>Mytilus edulis</i>) farms
N:07	K. Tangen and E. Dahl	Not received
N:08	S. Svensson, C. André, A.-S. Rehnstam-Holm and J. Hansson	Not received

THEME SESSION ON GLOBAL CHANGE ASPECTS (O)

O:01	O.V. Titov	Long-term cyclic succession of the Barents Sea ecosystem and prognostication of recruitment of commercial fish populations
O:02		Withdrawn
O:03	S.R. Kydersky and A. Zezera	Not received
O:04	S.-A. Malmberg and S. Jónsson	Global change aspects Icelandic oceanographic research and greenhouse effects
O:05	C. Schrum, F. Janssen, and U. Hübner	Modelling the interannual variability of hydro- and thermodynamics in the North Sea and the Baltic Sea
O:06	G.L. Hunt, C.L. Baduini, R.D. Brodeur, K.O. Coyle, J.M. Napp, J.D. Schumacher, P.J. Stabeno, D.A. Stockwell, T.E. Withledge, and S.I. Zeeman	Ecosystem responses of the southeastern Bering Sea to abnormal weather patterns in 1997 and 1998
O:07	T. Rossby	Current switching as a mechanism for rapid climate change
O:08	K.F. Drinkwater, D.B. Mountain, and A. Herman	Variability in the slope water properties off eastern North America and their effects on the adjacent shelves
O:09	I.M. Yashayaev, J.R.N. Lazier, R.A. Clarke, and R.M. Hendry	Decadal changes in deep water properties in the Northwest North Atlantic
O:10 Poster	A. Alvarez, A. Orfila, G. Vizoso, P. Vélez, S. Montserrat, and J. Tintoré	Forecasting climate variability for better management of marine resources
O:11 Poster	A. Lavín, H. Bryden and G. Parilla	Mechanisms of heat, freshwater, oxygen and nutrients transport at 24.5° N in the subtropical North Atlantic

THEME SESSION ON SUSTAINABILITY CRITERIA (P)

- P:01 M.V. Bravington, C.M. O'Brien, and T. Kevin Stokes Sustainable recruitment: the bottom line
- P:02 Withdrawn
- P:03 J.P. Hillis Optimisation versus sustainability as objectives in fisheries management
- P:04 F. Thurow On herring biomass in the Baltic Sea during the 20th century
- P:05 S. Garcia D.J. Staples and J. Chesson The FAO Guidelines for the development and use of indicators for sustainable development of marine capture fisheries and an Australian example of their application

THEME SESSION ON THE LANGUAGE OF FISHERIES SCIENCE AND MANAGEMENT (Q)

Q:01	T. Jakobsen	Fisheries management in the Barents Sea
Q:02	L.J. Richards and A. Mentzelopoulos	Evolving scientific advisory processes from Pacific Canada
Q:03	R. O'Boyle, J. Rice, and A. Sinclair	The peer review of science in the management of living aquatic resources
Q:04	M. Stocker	An analysis of Fisheries and Oceans Canada's Pacific Scientific Advice Review Committee (PSARC) advisory process
Q:05	T.P. Smith	The Northeast U.S. Regional Stock Assessment Workshop process: communicating with fishery managers
Q:06	J. Sigurjónsson	Communicating of science to the Icelandic fisheries community
Q:07	O. Tougaard	Not received
Q:08 Poster	A.M.P. Santos, L. Oliveira, and J. Aurélio	BASBLACK Project: an example of good collaboration between scientists and fishermen (No paper)
Q:09	P.D. Bailey and S. Yearley	Discourse in fisheries: constructing vessel monitoring systems and overfishing

**THEME SESSION ON THE RELATIONSHIP BETWEEN FISHING CAPACITY, EFFORT
AND MORTALITY (R)**

R:01	N. Madsen, L. Foldager, and R. Holst	The escape window as a management option to improve the size selectivity of the Baltic Sea cod fishery
R:02	V. Tschernij and R. Holst	Evidence of factors at vessel-level affecting codend selectivity in Baltic cod demersal trawl fishery
R:03		Not received
R:04	F.A. van Beek and M. Pastoors	Evaluating ICES catch forecasts: The relationships between implied and realized fishing mortality
R:05	A.D. Rijnsdorp, W. Dol, M. Hooyer, and M.A. Pastoors	Effects of fishing power and competitive interactions among vessels on the effort allocation on the trip level of the Dutch beam trawl fleet
R:06	B.A. Roel and G. Maharaj	Fishing effort and fishing capacity in the chokka squid jig fishery off South Africa
R:07	L. Millischer and D. Gascuel	Withdrawn
R:08	P. Petitgas, J.C. Poulard, and A. Biseau	Comparison of commercial and scientific cpue data to analyse catchability: megrim in the Celtic Sea
R:09	J.P. Hillis	The importance of financial costs of inflicting fishing mortality
R:10	P. Marchal, J. Rasmus Nielsen, H. Hovgård, and H. Lassen	Time changes in fishing power in Baltic Sea cod fisheries
R:11	P. Marchal, M. Pastoors, J.-W. de Wilde, S. Pascoe, H. Hovgård, and J. Andersen	A comparison of biological and economic indicators to estimate efficiency creeping in the Dutch flatfish fisheries in the North Sea
R:12		Withdrawn
R:13		Withdrawn
R:14 Poster	R. Ercoli, J. García, A. Aubone, L. Salvini, and A. Izzo	Single-grid sorting device (DEJUPA): Their selectivity evaluation in the Argentine hake (<i>Merluccius hubbsi</i>) fishery with regulatory mesh size in the trawl codend
R:15 Poster	A. Aubone, M. Renzi, R. Ercoli, and J. García	Optimal selectivity for biological rebuilding objectives in hake (<i>Merluccius hubbsi</i>) and the single-grid sorting device DEJUPA
R:16 Poster	C. Palma, P. Sousa, J. Ramos, T. Martinho, R. Martins, G. Pestana, P. Barros, and M. Afonso-Dias	Multivariate analysis of the Portuguese artisanal fishery: trip types and fishing effort

THEME SESSION ON EVALUATION OF COMPLETE FISHERIES SYSTEMS: ECONOMIC, SOCIAL, AND ECOLOGICAL ANALYSES (S)

- S:01 D. Kolody and K. Patterson Evaluation of NE Atlantic mackerel stock assessment models on the basis of simulated long-term management performance
- S:02 S.V. Prusov, B.F. Prischepa, Fisheries status of stocks and management of Atlantic salmon in S.S. Krylova, V.P. Russia in 1998
Antonova, and V.F. Bugaev
- S:03 A.V. Zubchenko, A.G. Salmon rivers of the Kola Peninsula. Some specific features of Potutkin, M.A. Svenning, management of Atlantic salmon stock in the Varzuga river in the light S.M. Kalyuzhin, and F. of new information on its in-river migrations (in-river behaviour) Økland
- S:04 C. Ulrich, B. Le Gallic, and Bioeconomic modelling of English Channel fisheries and their M.R. Dunn technical interactions: presentation of the simulation model BECHAMEL (BioEconomic CHannel ModEL)
- S:05 A. López, M.B. Santos, G.J. Trends in strandings of marine mammals on the Galician coast during Pierce, A.F. González, A.F. the 1990s
Guerra, X. Valeiras, and J. Wang
- S:06 A.F. Gonzalez Strandings and by-catches of marine mammals on the Spanish and Portuguese coasts from 1996 to 1998
- S:07 J. Freire and A. García-Allut Integration of fishers ecological knowledge in fisheries biology and management. A proposal for the case of the artisanal coastal fisheries of Galicia (NW Spain)
- S:08 L. Silva, J. Gil, and I. Definition of fleet components in the Spanish artisanal fishery of the Poster Sobrino Gulf of Cadiz (SW Spain, ICES Division IXa)

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THEME SESSION ON THE BAYESIAN APPROACH TO FISHERIES ANALYSIS (T)

T:01	C.M. O'Brien	An approach to stock-recruitment modelling based upon GLMs, HGLMs and DLMs
T:02	C.M. O'Brien	Time series models in fish recruitment - a journey from classical statistics to dynamic models and Bayesian forecasting
T:03	T.R. Hammond and C.M. O'Brien	An application of the Bayesian approach to stock assessment model uncertainty
T:04	S. Kuikka	Parameter and structural uncertainties in Bayesian decision analysis
T:05	M. Bernal, D.L. Borchers, S.T. Buckland, A. Lago de Lanzós, and L. Valdés	A new procedure for the assignment of ages to eggs of synchronous spawning fish

THEME SESSION ON M74 SYNDROME AND SIMILAR REPRODUCTIVE DISTURBANCES IN MARINE ANIMALS (U)

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| U:01 | E. Ikonen and A. Soivio | Does the feeding area choice of Atlantic salmon (<i>Salmo salar</i> L.) affect M74 mortality? |
| U:02 | J.D. Fitzsimons, S.B. Brown, L. Vandenbyllaardt, and B. Williston | Not received |
| U:03 | D.C. Honeyfield | Not received |
| U:04 | J.L. Zajicek, G. Wright, J. Fitzsimons, S. Brown, D.C. Honeyfield, and M. Holey | Not received |
| U:05 | J. Pickova, P.-O. Larsson, and A. Kiessling | Some possible explanations to Baltic Cod (<i>Gadus morhua</i> L.) reproduction disturbances with special emphasis on lipids – an overview |
| U:06 | M. Wolgamood, S.V. Marcquenski, S. Brown, J. Fitzsimons, D.E. Tillitt, and D. Honeyfield | Not received |
| U:07 | E. Ikonen, L. Karlsson, A. Mitans, and S. Hansson | Yolk-sac-fry mortality (M74) in Baltic salmon (<i>Salmo salar</i> L.): Indications from where and when they feed |
| U:08 | L. Karlsson, E. Ikonen, S. Hansson, and A. Mitans | Yolk-sac-fry mortality (M74) in Baltic Sea salmon (<i>Salmo salar</i> L.): Its relation to thiamine levels during migration and at spawning |
| U:09 | S. Hansson, L. Karlsson, E. Ikonen, O. Christensen, A. Mitans, D. Uzars, E. Petersson, and B. Ragnarsson | Yolk-sac-fry mortality (M74) in Baltic salmon (<i>Salmo salar</i> L.): Analyses of its relation to the diet |
| U:10 | S. Brown, G. Wright, M. Villela, J.L. Zajicek, J. Fitzsimons, D.C. Honeyfield, and D.E. Tillitt | Not received |
| U:11 | | Withdrawn |
| U:12 | P.J. Vuorinen, J. Paasivirta, M. Keinänen, T. Vartiainen, and R. Parmanne | Organochlorines and thiamine in salmon (<i>Salmo salar</i>) and prey species, Baltic herring (<i>Clupea harengus</i>) and sprat (<i>Sprattus sparattus</i>), in connection with the M74 syndrome |
| U:13
Poster | A.-K. Eriksson and B. Sundelin | Reproduction disturbances in amphipods (No paper) |
| U:14
Poster | C. Hill, S. Nellbring, and B.-E. Bengtsson | The FiRe and REDFISH projects: Swedish and Nordic research on reproductive disturbances in Baltic fish (No paper) |
| U:15 | P. Amcoff, L. Asplund, H. Börjeson, M. Hovén, and L. Norrgren | Thiamine levels and experimental induction of M74 in Baltic Salmon (<i>Salmo Salar</i>) |
| U:16 | J. Lundström and L. Norrgren | Ultrastructural studies of Baltic salmon yolk sac fry developing M74, a comparison to experimental studies. |

THEME SESSION ON THE NORTH EAST ATLANTIC ENVIRONMENT – THE CURRENT STATUS (V)

V:01	R. Boelens and J. Portmann	The quality status of the Celtic Seas
V:02	M.V. Angel	The quality status report of OSPAR Region V - the Wider Atlantic
V:03	R. Salchow	Towards a first ocean-wide assessment
V:04	F. van der Valk, L. Enserink, and B. Oudshoorn	Regional Quality Status Report 1999 – the current status of the Greater North Sea
V:05	A. Rodriguez de León	Not received
V:06	P.C. Reid, and S.R. Carlberg,	The mechanics of QSR 2000
V:07	L. Valdes	Biodiversity and human impact in the OSPAR region IV marine ecosystem (Strait of Gibraltar – Brest): Logistic and results
V:08	J. Klungsøyr and P.–E. Iversen	Not received
V:09 Poster	A. Jorge de Silva	The physical environment in the Iberian-Biscay area (OSPAR Region IV) (No paper)
V:10 Poster	S. Beddig and J. Sündermann	Synthesis and a new conception of North Sea Research (SYCON) (No paper)

THEME SESSION ON HEALTH AND WELFARE OF CULTIVATED AQUATIC ANIMALS (W)

- W:01 M.-L. Bégout Anras and J. P. Lagardère Effects of stocking densities on swimming characteristics of rainbow trout: applying acoustic telemetry to the culture environment
- W:02 J.D. Domagala and R. Bartel Survival to stage smolt of one summer old Atlantic salmon (*Salmo salar*) released into the River Gowienica (northern Poland)
- W:03 P. Martínez, V. Bettencourt, Á. Guerra, and N. Moltschaniwskyj How temperature influences muscle and cuttlebone growth under food-stress conditions on juvenile *Sepia elliptica* (Mollusca: Cephalopoda)
- W:04 G. Baeverfjord, T. Åsgård, I. Lein, and M. Rye Egg incubation temperature is a critical factor for normal embryonic development in Atlantic salmon
- W:05 G. Claireaux Metabolic scope: An indicator of welfare in fish?
- W:06 C. Mercier, G. Claireaux, J. Aubin, and C. Lefrançois Cardiac disorders in adult brown trout (*Salmo trutta*) raised in seawater in Brittany (France)
- W:07 C. Lefrançois, C. Mercier, and G. Claireaux Effect of rearing density on the routine metabolic expenditure of farmed rainbow trout (*Oncorhynchus mykiss*)

THEME SESSION ON SIZE-BASED PROCESSES IN THE SEA (POSTER SESSION) (X)

X:01 Poster		Withdrawn
X:02 Poster	A.V. Dolgov and Yu. A. Kovalev	Predator size-prey size relationships between cod and its preys in the Barents Sea (No paper)
X:03 Poster	M. Hjertenes Flyum, Ø. Fiksen, and A. Folkvord	Length dependent swimming cost and predation risk in herring larvae (<i>Clupea harengus</i> L.) (No paper)
X:04 Poster	S. Jung and E. D. Houde	Diversity, abundance, and biomass size spectra of pelagic fish in Chesapeake Bay
X:05 Poster		Withdrawn
X:06 Poster	A.D. Rijnsdorp	The influence of size-selective mortality on growth back-calculation of hard calcified structures such as otoliths
X:07 Poster		Withdrawn
X:08 Poster	J. Pope	Why size spectra are useful (No paper)

THEME SESSION ON COD AND HADDOCK RECRUITMENT PROCESSES – INTEGRATING STOCK AND ENVIRONMENTAL EFFECTS (Y)

Y:01	P.J. Wright, F.M. Kennedy, I.M. Gibb, J.R.G. Hislop, and W.S. MacDonald	The significance of age-related differences in spawning time to reproductive success in North Sea haddock
Y:02	B. Scott, G. Marteinsdottir, P. Wright, and O. Kjesbu	Sensitivity of potential recruitment to stock structure in the presence of temporally varying survival
Y:03	F. Thurow	On the biomass of cod in the Baltic Sea during the 20th century
Y:04	H.-H. Hinrichsen, U. Böttcher, R. Oeberst, R. Voss, and A. Lehmann	Drift patterns of cod early life stages in the Baltic: exchange between the western and eastern stock, a physical modelling approach
Y:05	T. Baranova and I. Shics	Reproduction of Eastern Baltic cod (<i>Gadus morhua callarias</i> L.) and formation of annual growth zones on the otoliths in the 1990s
Y:06	M. Kvalsund and C.T. Marshall	Condition and size composition effects on the simulated relationship between spawner biomass and total egg production for Northeast Arctic cod (<i>Gadus morhua</i> L.)
Y:07	C. Tara Marshall, O.S. Kjesbu, A. Thorsen, and P. Solemdal	Spawner quality effects on two measures of reproductive potential: have we been counting our eggs before they've hatched?
Y:08	R. Oeberst	Exchanges between the western and eastern Baltic cod stocks using the length distributions of trawl surveys
Y:09		Withdrawn
Y:10	B. MacKenzie, M.R. Heath, B. Ardlandsvik, J. Backhaus, B. Bogstad, A. Gallego, B. Godo, A. Gudmundsdottir, I. Harms, J. Heilemann, S. Jonsson, O. Kjesbu, E. MacKenzie, G. Marteinsdottir, E. Nielsen, B. Scott, G. Strugnell, G. Stefansson, A. Thorsen, A. Visser, and P. Wright	Overview of the EU FAIR Project 'STEREO' (Stock Effects on Recruitment Relationships)
Y:11	M.R. Heath, A. Gallego, J. R.G. Hislop, C. Needle, B. Scott, and P.J. Wright	The importance of the late pelagic and demersal settlement phases for recruitment dynamics in North Sea haddock
Y:12	V.L. Tretyak	On possibility of the use of the Ricker's model "stock-recruitment" for estimation of recruitment of North-Eastern Arctic cod population
Y:13	A. Gallego, M.R. Heath, P. Wright, and G. Marteinsdóttir	An empirical model of growth in the pelagic early life history stages of North Sea haddock
Y:14	A. Gallego and M.R. Heath	Short-term changes in the vertical distribution of haddock larvae as a function of environmental factors
Y:15	N.V. Mukhina	The use of Russian ichthyoplankton survey data in the forecasting of recruitment to Arcto-Norwegian cod stock

Y:16	B.MacKenzie, M. Plikshs, F. Köster, and H.-H. Hinrichsen	Does spatial match-mismatch of spawning and environmental conditions affect recruitment in Baltic cod?
Y:17	B.MacKenzie, R.A. Myers, and K. Bowen	Stock-recruitment meta-analyses reveal differences in fish stock productivity between marine ecosystems
Y:18	R.A. Myers, B.R. MacKenzie, and K. Bowen	Empirical models of carrying capacity, maximum reproductive rate, and species interactions using a meta-analytic approach
Y:19	H.-H. Eikeseth and O. Nakken	Maturation in North-East Arctic haddock
Y:20	K. Helle, B. Bogstad, C.T. Marshall, K. Michalsen, G. Ottosen, and M. Pennington	An evaluation of recruitment indices for northeast Arctic cod (<i>Gadus morhua</i> L.)
Y:21	Øyvind Fiksen and Arild Folkvord	Maternal effects and the benefit of yolk supply in cod larvae in different environments – a simulation model
Y:22	G. Allain, P. Petitgas, and P. Lazure	Environmental and stock effects on the recruitment of anchovy in the Bay of Biscay: a multivariate analysis
Y:23	L. Tybjerg and J. Tomkiewicz	Histological evaluation of gonadal and sexual maturity in female Baltic cod (<i>Gadus morhua</i>): preliminary results
Y:24		Withdrawn
Y:25	J. Tomkiewicz and F.W. Köster	Maturation processes and spawning time of cod in the Bornholm Basin of the Baltic Sea: preliminary results
Y:26	F.W. Köster, H.-H. Hinrichsen, D. Schnack, M.A. St. John, B. MacKenzie, J. Tomkiewicz, and M. Plikshs	Stock-recruitment relationships of Baltic cod incorporating environmental variability and spatial heterogeneity
Y:27	G. Kraus, A. Müller, K. Trella, and F.W. Köster	Temporal and spacial variability in fecundity of Baltic cod
Y:28	G.A. Begg and G. Marteinsdóttir	Historical spawning distribution and origin of pelagic juvenile cod (<i>Gadus morhua</i>) in Icelandic waters
Y:29	E.I. Karasiova	On the possible relation of the cod peak spawning time with the environmental conditions in the Gdansk Deep of the Baltic Sea
Y:30	K. Thorisson and T.H. Asgeirsson	Short term changes in a cod larval patch west of Iceland 1997
Y:31	M. Plikshs, H.-H. Hinrichsen, F.W. Köster, J. Tomkiewicz, and V. Berzins	Baltic cod reproduction in the Gotland Basin: annual variability and possible causes
Y:32	R. Oeberst and M. Bleil	Relations between the year class strength of the western Baltic cod and inflow events in the autumn
Y:33	Eric P.M. Grist	Not received

- Y:34 G. Marteinsdóttir and H. Björnsson Time and duration of spawning of cod in Icelandic waters
- Y:35 Withdrawn
Poster

THEME SESSION ON ECOSYSTEM MANAGEMENT – CAN WE MAKE IT OPERATIONAL? (Z)

Z:01	D.E. Duplisea and M.V. Bravington	Harvesting a size-structured ecosystem
Z:02	C.W. Fowler and R.J.M. Crawford	Sustainable fisheries management for ecosystems – with examples for seasonal allocation
Z:03	M. Sinclair, R. O'Boyle, L. Burke, and S. D'Entrement	Incorporating ecosystem objectives within fisheries management plans in the maritime region of Atlantic Canada
Z:04	S. Hansson	Ecological aspects on fisheries management
Z:05	C. Ulrich, D. Gascuel, and M. Dunn	Analysis of the impact of fishing activities on exploited marine resources at the ecosystem scale: the case of English Channel fisheries
Z:06	T. Gytre	Operational data acquisition and internet presentation of marine environmental data from ships of opportunity and fixed monitoring stations
Z:07	J. Rice	How complex should operational ecosystem objectives be?
Z:08	F. Ribeiro, S. Ramos, and P. Santos	Evaluation of the amount of undersized sand sole (<i>Solea lascaris</i> Risso, 1810) caught in the Portuguese fisheries
Z:09	E.I. Naumenko	Trophic chain length of the zooplankton community in the Vistula Lagoon and environment factors impact
Z:10	R.L.P. Lanfers	Basic elements for the implementation of an ecosystem approach in marine management
Z:11	K. Sherman and A.M. Duda	A strategic approach to marine ecosystems management

**THEME SESSION ON MICROPROCESSORS AND THINGS THAT SWIM IN THE OCEAN:
SMART TAGS IN THE STUDY OF MARINE LIFE: (AA)**

AA:01	J.D. Metcalfe, E. Hunter, B.H. Holford, and G.P. Arnold	The application of electronic data storage tags to spatial dynamics of fish populations
AA:02	P. Steingrund	Studies of vertical migration of wild Faroe Plateau cod using data storage tags
AA:03	M. Holm, G.P. Arnold, and K.Ø. Midling	Capture and handling of fish for electronic tagging – a review
AA:04	Withdrawn	
AA:05	L. Karlsson, E. Ikonen, H. Westerberg, and J. Sturlaugsson	Data storage tag study of salmon (<i>Salmo salar</i>) migration in the Baltic: The spawning migration of wild and hatchery-reared fish and a comparison of tagging methods
AA:06	H. Westerberg, J. Sturlaugsson, E. Ikonen, and L. Karlsson	Data storage tag study of salmon (<i>Salmo salar</i>) migration in the Baltic: Behaviour and the migration route as reconstructed from SST data
AA:07	H. Westerberg, P. Eveson, D. Welch, L. Karlsson, and E. Ikonen	Data storage tag study of salmon (<i>Salmo salar</i>) migration in the Baltic: The performance of tags
AA:08	K.D. Friedland, R.V. Walker, N.D. Davies, K.W. Myers, G.W. Boehlert, S. Urawa, and Y. Ueno	Inference on open-ocean orientation of chum salmon during their return migration based on data from data storage tags
AA:09	Robert V. Walker, K.W. Myers, N.D. Davis, K.Y. Aydin, K.D. Friedland, H. R. Carlson, G.W. Boehlert, S. Urawa, Y. Ueno, and G. Anma	Ambient temperatures and diurnal behavior as indicated by data storage tags on salmonids in the North Pacific
AA:10	Withdrawn	
AA:11	Christopher J. Bridger, Richard K Booth, R. Scott McKinley, and David A. Scruton, and R. Lindstrom	Monitoring fish behaviour with a remote, bi-modal (acoustic/radio) biotelemetry system
AA:12	P. Tyack, M. Johnson, D. Nowacek	A digital acoustic recording tag for measuring the response of marine mammals to sound
AA:13	S. Panigada, M. Zanardelli, S. Canese, and M. Jahoda	Fin whales tracked with Velocity-Time-Depth-Recorder radio tags in the western Mediterranean Sea
AA:14	E. González-Gurriarán and C. Bernárdez	Migratory patterns in the spider crab (<i>Maja squinado</i>) using telemetry and electronic tags
AA:15	D.G. Reddin, J.B. Dempson, P. Downton, C.C. Mullins, and K.D. Friedland	Migration of Atlantic salmon kelts (<i>Salmo salar</i> L.) in relation to sea water temperature in Newfoundland, 1998

POSTER SESSION

- Post:01 R.P. Briggs, M.J. Armstrong, M. Dickey-Collas, M. Allen, J. Whitmore, and N. McQuaid Not received
- Post:02 I.P. Afonso-Dias, C. Reis, and J.P Andrade Geographic variation of *S. lascaris* in Southwest Iberian waters based on meristic counts and morphometric measurements
- Post:03 G. Ejdung, L. Byrén, R. Elmgren, and H. Cederwall Large and small scale studies of oxygen deficiency on Baltic benthos
- Post:04 P. Lucio Horse mackerel (*Trachurus trachurus* L. 1758) feeding in the Southern Bay of Biscay: seasonal and length variations
- Post:05 P. Lucio, I. Quincoces, and M. Santurtún Otolith structure of the Horse mackerel, *Trachurus trachurus* L. 1785, determined by scanning electron microscopy
- Post:06 M. Santurtun, P. Lucio, and I. Quincoces Comparative image techniques for ageing otoliths of hake *Merluccius merluccius* (L. 1758)
- Post:07 I. Quincoces, M. Santurtún, and P. Lucio Photographical study using scanning electron microscopy techniques of illicia of White Anglerfish, *Lophius piscatorius* (L. 1758)
- Post:08 Iñaki Quincoces, Paulino Lucio, and Marina Santurtún The growth structure in Black Anglerfish, *Lophius budegassa* (Spinola 1807) illicia: a photographic approximation
- Post:09 V. Bettencourt and A. Guerra Growth increments and biomineralization process in cephalopod statoliths
- Post:10 M.E. Cunha, P. Lopes and A. dos Santos Sardine (*Sardina pilchardus*) daily egg production in ICES Division IXa (Lat. 41° 50' , 36° 00'N) January 1999 - Methods and estimation