

Contributions to the 2004 Annual Science Conference

Gen	General Assembly Reports and Papers of General Interest.....
Del	Delegates Meetings
Fi	Finance Committee.....
Pub	Publications Committee.....
A	Consultative Committee
MCAP	Management Committee for the Advisory Process
ACFM	Advisory Committee on Fishery Management Assessment Working Group Reports
ACME	Advisory Committee on the Marine Environment-related Working Group Reports
ACE	Advisory Committee on Ecosystems.....
B	Fisheries Technology Committee.....
C	Oceanography Committee
D	Resource Management Committee.....
E	Marine Habitat Committee
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G	Living Resources Committee
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<i>Theme Sessions</i>	
J	Prey-Predator Interactions in Dynamic Environments: Methods, Approaches and Key Issues for the Study of Recruitment Processes
K	The Life History, Dynamics and Exploitation of Living Marine Resources: Advances in Knowledge and Methodology
L	Baltic Sea Ecosystem Structure and Dynamics – Consequences of Physical and Anthropogenic Forcing
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O	Larval Fish Growth, Feeding and Recruitment in Relation to Patterns and Activity in Plankton Communities
P	Physical-biological Interactions: Experiments, Models and Observation.....
Q	Recent Advances in the Oceanography and Biology of the Iberian Waters and Adjacent Shelf Seas: Results from Integrated Multidisciplinary Projects
R	New Developments in Fisheries Acoustics: Applications in Bottom Trawl Surveys and Multi-frequency Species Identification
S	Use of Estuarine and Freshwaters Habitats and the way that Freshwater and Diadromous Fish use Them.....
T	Acoustic Seabed Classification – Applications in Fisheries Science and Ecosystem Studies
V	Mariculture in the Coastal Zone: Sustainability, Perspective and Limitations.....
Y	Conserving Biodiversity and Sustaining Fisheries through MPAs
Z	How Useful are Biological Effects Measurements in Marine Ecosystem Management?
AA	Cold Water Corals and Structural Habitats in Deep Water: Biology, Threats and Protection
CC	Cephalopod Stocks: Review, Analysis, Assessment, and Sustainable Management
DD	Mortality and Linkages between Fish Eggs/Larvae and their Predators in Marine Ecosystems – A Multidisciplinary Approach.....
EE	Stock Identification Methods.....
FF	Modelling Marine Ecosystems and their Exploitation

MCAP

MCAP:01	MCAP report from January meeting
MCAP:02	MCAP-MICC report from March
MCAP:03	Study Group on Quality Assurance [SGQUA]
MCAP:04	MCAP report from April meeting

ACFM

ACFM:01	Working Group on the Assessment of Northern Shelf Demersal Stocks [WGNSDS]
ACFM:02	Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrim [WGHMM]
ACFM:03	Working Group on the Assessment of Southern Shelf Demersal Stocks [WGSSDS]
ACFM:04	Study Group on Sea Bass [SGBASS]
ACFM:05 Ref. G	<i>Pandalus</i> Assessment Working Group [WGPAND]
ACFM:06 Ref. D, G	ICES/NAFO Working Group on Harp and Hooded Seals [WGHARP]
ACFM:07	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak [WGNSSK]
ACFM:08	Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine, and Anchovy [WGMHSA]
ACFM:09 Ref. G	ICES/EIFAC Working Group on Eels [WGEEL]
ACFM:10	ICES/NSCFP Study Group on the Incorporation of Additional Information from the Fishing Industry into Fish Stock Assessments [SGFI]
ACFM:11 Ref. D	Study Group on the Development of Fishery-based Forecasts [SGDFF]
ACFM:12	Workshop on Sampling and Calculation Methodology for Fisheries Data [WKSCMFD]
ACFM:13	Planning Group on Commercial Catch, Discards and Biological Sampling [PGCCDBS]
ACFM:14 Ref. AFWG, WGNPBW, WGMHSA	Study Group on Assessment Methods Applicable to Assessment of Norwegian Spring Spawning Herring and Blue Whiting Stock [SGAMHBW]
ACFM:15 Ref. G	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources [WGDEEP]
ACFM:16	Study Group for Long Term Advice [SGLTA]
ACFM:17 Ref. H, WGBFAS	Study Group on Closed Spawning Areas of Eastern Baltic Cod [SGCSA]
ACFM:18	Herring Assessment Working Group for the Area South of 62°N [HAWG]
ACFM:19	Working Group on <i>Nephrops</i> Stocks [WGNEPH]
ACFM:20 Ref. I	Working Group on North Atlantic Salmon [WGNAS]
ACFM:21 Ref. G, H	Study Group on Ageing Issues in Baltic Cod [SGABC]
ACFM:22 Ref. H	Baltic Fisheries Assessment Working Group [WGBFAS]
ACFM:23 Ref. I	Baltic Salmon and Trout Assessment Working Group [WGBAST]
ACFM:24	Northern Pelagic and Blue Whiting Fisheries Working Group [WGNPBW]
ACFM:25	North-Western Working Group [NWWG]
ACFM:26	Fishery Statistics Liaison Working Group [WGSTAL]
ACFM:27	Working Group on the Assessment of Northern Shelf Demersal Stocks [WGNSDS]
ACFM:28	Arctic Fisheries Working Group [AFWG]

ACFM:29	Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrim [WGHMM]
ACFM:30 Ref. G, I	ICES/EIFAC Working Group on Eels [WGEEL]
ACFM:31 Ref. G	Study Group on Sea Bass [SGBASS]
ACFM:32 Ref. D, G	ICES/NAFO Working Group on Harp and Hooded Seals [WGHARP]
ACFM:33	Expert Group on Rockall Haddock Recovery Plans following a request for advice made on behalf of the European Community and Russian Federation
Coded for 2005	Working Group on the Assessment of Southern Shelf Demersal Stocks [WGSSDS] (Meeting 29 June to 8 July 2004)
Coded for 2005	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak [WGNSSK] (Meeting from 7–16 September 2004)
Coded for 2005	Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine and Anchovy [WGMHSA] (Meeting from 7–16 September 2004)
Coded for 2005	<i>Pandalus</i> Assessment Working Group [WGPAND] (Meeting 27 October to 5 November 2004)
Coded for 2005	Study Group on Stock Identity and Management Units of Redfishes [SGIMUR] (Meeting from 31 August to 3 September 2004)

ACME

ACME:01	Steering Group on Quality Assurance of Biological Measurements in the Northeast Atlantic [SGQAE]
ACME:02 Ref. H	The ICES/HELCOM Steering Group on Quality Assurance of Chemical Measurements in the Baltic Sea [SGQAC]
ACME:03 Ref. C, E, H	The ICES/HELCOM Steering Group on Quality Assurance of Biological Measurements in the Baltic Sea [SGQAB]
ACME:04	ICES/IOC/IMO Working Group on Ballast and Other Ship Vectors [WGBOSV]
ACME:05 Ref. E, G	Working Group on Introductions and Transfers of Marine Organisms [WGITMO]
ACME:06 Ref. E	Joint ICES/OSPAR Workshop on Integrated Monitoring of Contaminants and their Effects in Coastal and Open-Sea Areas [WKIMON]

ACE

ACE:01 Ref. E, WGECO, BEWG	Study Group on Ecological Quality Objectives for Sensitive and for Opportunistic Benthos Species [SGSOBS]
ACE:02 Ref. E, G	Working Group on Marine Mammal Ecology (WGMME)
ACE:03 Ref. D, E, G	Working Group on Ecosystem Effects of Fishing Activities [WGECO]
ACE:04 Ref. ACME, C, E	Study Group to Review Ecological Quality Objectives for Eutrophication [SGEUT]
ACE:05 Ref. ACFM,	Study Group on Management of Integrated Data [SGMID]

ACME

ACE:06 The Regional Ecosystem Study Group for the North Sea [REGNS]

ACE:07 Ref. E Study Group on Cold Water Corals [SGCOR]

Fisheries Technology Committee (B)

B:01 Ref. G Study Group on Survey Trawl Gear for the IBTS Western and Southern Areas [SGSTG]

B:02 Study Group on Collection of Acoustic Data from Fishing Vessels [SGAFV]

B:03 Study Group on Acoustic Seabed Classification [SGASC]

Ref. ACE, E

B:04 Planning Group on the HAC Data Exchange Format [PGHAC]

B:05 ICES-FAO Working Group on Fishing Technology and Fish Behaviour [WGFTFB]

Ref. ACE

B:06 Working Group on Fisheries Acoustics Science and Technology [WGFAST]

B:07 Workshop on Survey Design and Data Analysis [WKSDDA]

Ref. D, G

B:08 Ref. H Study Group of Target Strength Estimation in the Baltic Sea [SGTSEB]

B:09 Study Group on Unaccounted Fishing Mortality [SGUFM]

Ref. ACFM

Oceanography Committee (C)

C:01 Working Group of Phytoplankton Ecology [WGPE]

Ref. ACME

C:02 Workshop on Future Directions in Modelling Physical-Biological Interactions [WKFDPI]

C:03 Working Group on Modelling of Physical/Biological Interactions [WGPBI]

C:04 Ref. ICES-EuroGOOS Planning Group on the North Sea Pilot Project (NORSEPP)

ACFM, ACME,
ACE, D, E, G

C:05 Ref. Working Group on Seabird Ecology [WGSE]

ACME, ACE

C:06 Working Group on Oceanic Hydrography [WGOH]

Ref. ACME

C:07 Ref. Working Group on Zooplankton Ecology [WGZE]

ACME, ACE

C:08 ICES-IOC Working Group on Harmful Algal Bloom Dynamics [WGHABD]

Ref. ACME

C:09 Working Group on Recruitment Processes [WGRP]

C:10 Ref. ICES-IOC Steering Group on GOOS [SGGOOS]

ACME, ACE

C:11 Working Group on Marine Data Management [WGMDM]

- C:12 ICES-IOC Study Group on the Development of Marine Data Exchange Systems using XML [SGXML]
- C:13 ICES/GLOBEC Working Group on Cod and Climate Change
- C:14 Ref. H Workshop on New and Classic Techniques for the Determination of Numerical Abundance and Biovolume of HAB-species – evaluation of the cost, time-efficiency and intercalibration methods [WKNCT]
- C:15 Steering Group for the ICES/GLOBEC North Atlantic Programme and Regional Office [SGNARO]
Ref. Bureau

Resource Management Committee (D)

- D:01 Study Group on Redfish Stocks [SGRS]
Ref. ACFM
- D:02 Study Group on Growth, Maturity and Condition in Stock Projections [SGGROMAT]
Ref. ACFM, C, G, H
- D:03 Working Group on Methods on Fish Stock Assessments [WGMG]
Ref. ACFM, G
- D:04 Workshop on Advanced Fish Stock Assessment Techniques [WKAFAT]
Ref. ACFM, G
- D:05 International Bottom Trawl Survey Working Group [IBTSWG]
- D:06 Working Group on Fishery Systems [WGFS]
Ref. ACFM, ACE
- D:07 Planning Group on Northeast Atlantic Pelagic Ecosystem Surveys [PGNAPES]
Ref. ACFM, ACE, G
- D:08 Study Group on Multispecies Assessment in the North Sea [SGMSNS]
Ref. ACFM, ACE, G
- Coded for 2005 Study Group on Age-length Structured Assessment Models [SGASAM] (Meeting 6–10 December 2004)

Marine Habitat Committee (E)

- E:01 Ref. Working Group on the Statistical Aspects of Environmental Monitoring [WGSAEM]
ACME, ACE
- E:02 Ref. Working Group on Marine Sediments in Relation to Pollution [WGMS]
ACME
- E:03 Marine Chemistry Working Group [MCWG]
Ref. ACME, C
- E:04 Working Group on Biological Effects of Contaminants [WGBEC]
Ref. ACME
- E:05 Study Group on the North Sea Benthos Project 2000 [SGNSBP]
Ref. ACME, ACE
- E:06 Working Group on Marine Habitat Mapping [WGMHM]

Ref. ACE, B
 E:07 Working Group on the Effects of Extraction of Marine Sediments on the Marine
 Ref. ACME, Ecosystem [WGEXT]
 ACE, D
 E:08 Study Group on Information Needs for Coastal Zone Management [SGINC]
 Ref, ACME, F
 E:09 Benthos Ecology Working Group [BEWG]
 Ref. ACME,
 ACE, C

Mariculture Committee (F)

F:01 Working Group on Pathology and Diseases of Marine Organisms [WGPDMO]
 Ref. ACME, E,
 I
 F:02 Working Group on Environmental Interactions of Mariculture [WGEIM]
 Ref. ACME
 F:03 Working Group on Marine Fish Culture [WGMAFC]
 Ref. ACME, I
 F:04 Working Group on the Application of Genetics in Fisheries and Mariculture
 Ref. ACFM, [WGAGFM]
 ACME, I
 F:05 Working Group on Marine Shellfish Culture [WGMASC]
 Ref. ACME, G

Living Resources Committee (G)

G:01 Workshop on Mackerel and Horse Mackerel Egg Staging and Identification
 [WKMHME]
 G:02 Working Group on Cephalopod Fisheries and Life History [WGCEPH]
 Ref. ACFM,
 ACE
 G:03 Planning Group on North Sea Cod and Plaice Egg Surveys in the North Sea
 Ref. D [PGEGBS]
 G:04 Working Group on Beam Trawl Surveys [WGBEAM]
 Ref. ACFM, D
 G:05 Planning Group for Herring Surveys [PGHERS]
 Ref. D, HAWG
 G:06 Study Group on Regional Small Pelagic Fish [SGRESP]
 Ref. ACFM,
 ACE
 G:07 Planning Group on Aerial and Acoustic Surveys for Mackerel [PGAAM]
 Ref. ACFM, B
 G:08 Baltic International Fish Survey Working Group [WGBIFS]
 Ref. D, H
 G:09 Working Group on Fish Ecology [WGFE]
 Ref. ACE, D, I

G:10 Ref. D	Working Group on Mackerel and Horse Mackerel Egg Surveys [WGMEGS]
G:11	Working Group on Elasmobranch Fishes [WGEF]
G:12	Stock Identification Methods Working Group [SIMWG]
G:13 Ref. D	Study Group on the Biology and Life History of Crabs [SGCRAB]
Coded for 2005	Working Group on <i>Crangon</i> Fisheries and Life History [WGCRAN] (Meeting 4–9 October 2004)
Coded for 2005	Study Group on the Estimation of Spawning Stock Biomass of Sardine and Anchovy [SGSBSA] (Meeting in October/November 2004)

Baltic Committee (H)

H:01	Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD]
H:02	Study Group on Baltic Ecosystem Health Issues in support of the BSRP [SGEH]
H:03	Study Group on Baltic Ecosystem Model Issues in support of the BSRP [SGBEM]
H:04 Ref. ACE	Study Group on Baltic Fish and Fisheries Issues in the BSRP [SGBFFI]
H:05	ICES-IOC-SCOR Study Group on GEOHAB Implementation in the Baltic [SGGIB]
H:06	Study Group on Multispecies Assessment in the Baltic [SGMAB]

Diadromous Fish Committee (I)

I:01 Ref. ACFM, G	Study Group on the By-catch of Salmon in Pelagic Trawl Fisheries [SGBYSAL]
I:02 Ref. ACFM, ACE, G	Study Group on the Status of Diadromous Fish Species [SGSDFS]
To be coded for 2005	Study Group on Salmon Scale Readings [SGSSR] (Meeting 15–16 November 2004)

Prey-Predator Interactions in Dynamic Environments: Methods, Approaches and Key Issues for the Study of Recruitment Processes (J)

Code	<i>First Author, Co-Author(s) and Title of Abstract</i>
J:01	<i>Henn Ojaveer, M. Simm, and A. Lankov</i> : Potential impact of <i>Cercopagis pengoi</i> to fish recruitment in the Gulf of Riga (Baltic Sea)
J:02	<i>D. Mountain, J. Green, J. Sibunka, and D. Johnson</i> : Early larval mortality of cod and haddock on Georges Bank, 1995–1999
J:03	Withdrawn
J:04	<i>Xabier Irigoien, Andres Uriarte, Maria Santos, Iñaki Artetxe, A. Albaina, Leire Ibaibarriaga, Lorenzo Motos, Angel Lopez Urrutia, and Anthony Richardson</i> : Exploring loopholes: a mechanism for anchovy survival in the Bay of Biscay
J:05	<i>Edward J. Martino and E. D. Houde</i> : Environmental controls and density dependent constraints in the recruitment process of Striped Bass in the estuarine transition zone of Chesapeake Bay
J:06	<i>Leonardo R. Castro, Alejandra Llanos, María C. Krautz, and Gabriel Claramunt</i> : Inter-population and intra-seasonal variations in egg quality and yolk sac larval traits of the <i>Anchoveta Engraulis ringens</i> along Chile
J:07	<i>Begoña Villamor, C. Gonzalez-Pola, A. Lavín, L. Valdés, A. Lago de Lanzós, C. Franco, J. M. Cabanas, M. Bernal, and E. Alvarez</i> : Distribution and survival of larvae of mackerel (<i>Scomber scombrus</i>) in the North and Northwest of the Iberian Peninsula, in relation to environmental conditions during spring 2000
J:08	<i>Jesper Boje and Claus S. Simonsen</i> : Settling and factors affecting 0-group distribution of Greenland halibut, <i>R. hippoglossoides</i> (Walbaum), in West Greenland waters.
J:09	Withdrawn
J:10	<i>E.W. North, R. R. Hood, M. Li, T. Gross, and L. Zhong</i> : Assessing precision in models of larval transport: the effect of simulated circulation patterns and biological processes
J:11	<i>R. Christopher Chambers and David A. Witting</i> : Size-based predation risk in young-of-year Atlantic tomcod in the Hudson River Estuary, USA
J:12	<i>Kristina Barz and Hans-Jürgen Hirche</i> : Predatory impact of <i>Aurelia aurtia</i> on the zooplankton community in the Bornholm Basin (central Baltic)
J:13	<i>Pierre Petitgas, Pierre Beillois, Patrick Grellier, Jacques Massé</i> : On the importance of adults in maintaining population habitat occupation of recruits as deduced from observed schooling behaviour of age-0 anchovy in the bay of Biscay
J:14	<i>Gwen Allain, Pierre Petitgas, Pascal Lazure, Patrick Grellier</i> : Use of a biophysical larval drift growth and survival model to explore the interaction between a stock and its environment: anchovy recruitment in Biscay
J:15 Poster	<i>J.O. Schmidt and H.-H. Hinrichsen</i> : Variance of nauplii abundance and diversity influences fish larval survival: a theoretical approach
J:16 Poster	<i>M. Christina Krautz, Leonardo R. Castro, and Margarita Gonzalez</i> : Euphausiid predation on anchoveta (<i>Engraulis Ringens</i>) eggs in the spawning zone of northern Chile and its incidence on the natural egg mortality estimations
J:17 Poster	Withdrawn
J:18 Poster	Withdrawn
J:19 Poster	<i>Carolina Parada and S. Hinckley</i> : A pre-recruitment index for walleye pollock in the Gulf of Alaska using a biophysical model

The Life History, Dynamics and Exploitation of Living Marine Resources: Advances in Knowledge and Methodology (K)

- K:01 *Max Cardinale, J. Hjelm, and M. Casini*: Effect of temperature on recruitment success of herring and sprat stocks in the North Atlantic
- K:02 *V.M. Borisov, A. A. Elizarov, and V. D. Nesterov*: Environment is determinative for recruitment formation of the NEA cod (*Gadus morhua* L.) stock
- K:03 *Christoph Petereit, C. Clemmesen, G. Kraus, and D. Schnack*: High resolution temperature influences on egg and early larval development of Baltic cod (*Gadus morhua*)
- K:04 *Vladimir Laptikhovsky*: A trophic ecology and reproductive investment in two grenadier sibling - species (Macrouridae, Pisces) in deep waters of the Southwest Atlantic.
- K:05 *Ewan Hunter and Audrey Darnaude*: Determination of plaice lifetime movements in the North Sea by linking natural and electronic data records
- K:06 *Kerstin Söderberg and A. Bignert*: Site specific factors necessary to consider in temporal trend studies of fish populations?
- K:07 *Frøydis Rist and Aril Slotte*: Diet of cod, haddock and saithe related to the spawning migration of Barents Sea capelin
- K:08 *Silvia Lorenzo-Abalde, África González-Fernández, and José M. Fuentes*: Identification of mussel larvae from plankton samples by monoclonal antibodies
- K:09 *Mike Armstrong, Peter Bromley, and Pieter-Jan Schön*: Changes in growth and maturity in expanding and declining stocks: evidence from haddock, cod and whiting populations in the Irish and Celtic Seas
- K:10 *Karin Troost, Pauline Kamermans, Eize J. Stamhuis, and Wim J. Wolff*: Are introduced oysters (*Crassostrea gigas*) hampering the recruitment of indigenous bivalve filter feeders?
- K:11 *Feodor Litvinov*: The dense male aggregation over seamounts as an integral part of species range in the Blue shark *Prionace glauca*
- K:12 *Gerd Kraus*: Atresia as a mechanism influencing fecundity of Eastern Baltic cod (*Gadus morhua*)
- K:13 *A. D. Rijnsdorp, O. A. Van Keeken, and L. J. Bolle*: Changes in the productivity of the southeastern North Sea as reflected in the growth of plaice and sole
- K:14 Withdrawn
- K:15 *Keith Reid and Eugene J. Murphy*: Measuring life-history parameters of Antarctic krill using upper-trophic level predators
- K:16 *Tristan Rouyer, Emmanuel Chassot, and Didier Gascuel*: Analyses of ICES stock assessment procedures and proposals for methodological improvements.
- K:17 *Marie Lesueur, T. Rouyer, and D. Gascuel*: Control of assessment for demersal fish stocks in ICES area: analysis for 36 stocks and investigation of some potential bias sources
- K:18 Withdrawn
- K:19 *F. Patokina and Feodor Litvinov*: Food composition and distribution of demersal elasmobranchs on shelf and upper slope of North-West Africa
- K:20 *H. Murua and L. Motos*: Variability of the European hake (*Merluccius merluccius*) egg production in the Bay of Biscay
- K:21 *T. E. Helser, H. L. Lai, and I. J. Stewart*: A Bayesian hierarchical meta-analysis of growth on the U.S. west coast hake *Sebastes* complex
- K:22 *Joana F. Cardoso, José F. Loff, Ana R. Martins and Henk W. van der Veer*: Spatial and temporal variability in growth and reproduction of the Japanese cupped oyster *Crassostrea gigas* (Thunberg, 1793) as indicators of the adaptation to northern European waters
- K:23 Withdrawn
- K:24 *Enrique Portilla, E. McKenzie, and D. Beare*: Inter stage egg mortality estimation using birth death process models: a worked example using Atlantic mackerel

- K:25 *O. A. Van Keeken, M. Van Hoppe, R. E. Grift, and A. D. Rijnsdorp*: The effect of changes in the spatial distribution of juvenile plaice in the North Sea (*Pleuronectes platessa*) on the management of its stocks.
- K:26 *Bjarte Bogstad, Daniel Howell, and Morten Nygaard Åsnes*: A closed life-cycle model for Northeast Arctic cod
- K:27 *M. O. Hammill*: Grey seal teeth as indicators of climate variability
- K:28 *Christian Jørgensen, Bruno Ernande, Øyvind Fiksen, and Ulf Dieckmann*: Skipped spawning is common for the Northeast Arctic cod in a life-history energy allocation model
- K:29 *Geir Ottersen, Dag Ø. Hjermann and Nils Chr. Stenseth*: Dramatic changes in spawning stock age-structure of Barents Sea cod
- K:30 *Höskuldur Björnsson and Ólafur K. Pálsson*: Distribution patterns and dynamics of fish stocks under recent climate change in Icelandic waters
- K:31 *Konstantin Drevetnyak, Kjell H. Nedreaas, and Anton Kluev*: Spatial migration pattern of deep-sea redfish (*Sebastes mentella* Travin) of the Norwegian-Barents population from survey data
- K:32 *Rune Vabø and G. Skaret*: Simulating collective decisions and sorting in schools of spawning herring
- K:33 Withdrawn
- K:34 *Arnaud Bertrand, José Cordova, Maria Angela Barbieri, Francisco Leiva and François Gerlotto*: Contrasted day and night ecological preferenda of jack mackerel (*Trachurus murphyi*) in the Humboldt Current system: a 'unique' behavioural adaptation to cyclic availability of preys
- K:35 *Mikko Heino and Ulf Dieckmann*: Exploitation as a driving force of life history evolution: methods and empirical analyses
- K:36 *Kevin D. E Stokesbury, Bradley P. Harris, Michael C. Marino II, and Jacob I. Nogueira*: Estimation of sea scallop abundance using a video survey in off-shore USA waters
- K:37 *Bradley P. Harris and Kevin D.E. Stokesbury*: Comparison of tag-recapture shell growth of sea scallops (*Placopecten magellanicus*) in two areas of western Georges Bank
- K:38 *Mariano Gutierrez, Sophie Bertrand and François Gerlotto*: School typology and 3D dynamics: study of the behavioural mechanisms allowing adaptation of collective structures to environmental changes
- K:39 *Jorge Castillo, Mauricio Braun, and María Angela Barbieri*: Impacts of early stage, adult biomass and spatial coverage in the captures of Spanish Sardine (*Sardinops sagax*) and Anchoveta (*Engraulis ringens*) in northern of Chile.
- K:40 *S. Vaz, A. Carpentier, and F. Coppin*: Eastern English Channel Fish Community from 1988 to 2003 and its Relation to the Environment
- K:41 Withdrawn
- K:42 *Jon Brodziak, Steve Cadrin, Christopher Legault, and Steve Murawski*: Goals and strategies for rebuilding New England groundfish stocks
- K:43 *Georg H. Engelhard and Mikko Heino*: Dynamics in frequency of skipped reproduction in Norwegian spring-spawning herring
- K:44 Poster *Konstantin Sokolov*: Discards of the NEA cod during bottom trawl fishery in the Barents Sea and adjacent waters in 1983-2002
- K:45 Poster *Dmitri Vasilyev*: Winsorization: does it help in cohort models?
- K:46 Poster *Dariusz Fey, J. Hare, G. Bath Martin, J. Morris, W. Hettler*: Validation of back-calculation methods for laboratory reared spot (*Leiostomus xanthurus*)
- K:47 Poster *Dariusz Fey, G. Bath Martin, J. Hare, J. Morris*: Effect of otolith type and preparation technique on age estimation of larval and juvenile spot (*Leiostomus xanthurus*)
- K:48 Poster *S. Pianova*: Characteristics of reproductive system of haarder *Liza haematocheila* (Temminck et Schlegel, 1845), naturalized into the Black Sea and the Sea of Azov basin.

- K:49 Withdrawn
- K:50 Poster *Lisa Borges, Emer Rogan, and Rick Officer*: Factors influencing discards: modelling discarding ogives
- K:51 Poster *Michel Bertignac*: A preliminary simulation study of the implications of changes in growth on the assessment of Northern stock of Hake and management advice
- K:52 Poster *H. Murua, P. Lucio, M. Santurtun and L. Motos*: Temporal and spatial variation in the Batch Fecundity of the European hake, *Merluccius merluccius*, of the Bay of Biscay
- K:53 Poster *P. Lucio, M. Korta, I. Quincoces, H. Murua, and M. Santurtún*: Northern Hake Maturity Ogive based on histological analysis for the period 1996-2001
- K:54 Poster *M. Korta, I. Quincoces, H. Murua, and P. Lucio*: 3-D reconstruction of the postovulatory follicles of European hake, *Merluccius merluccius*, as a tool to validate the ageing criteria of POFs
- K:55 Poster *Joana F. Cardoso, Johannes J. Witte, and Henk W. van der Veer*: Spatial and temporal variability in growth and reproduction in bivalves: the Baltic clam *Macoma balthica* (L.) as an example species
- K:56 Poster *Jan Schroeder, Karsten Zumholz, Thor H. Hansteen, and Dietrich Schnack*: Influence of temperature and salinity on the microchemical pattern of fish-otoliths
- K:57 Poster *F. Vitale, H. Svedäng, and M. Cardinale*: Ovarian development in cod (*Gadus morhua*) from the Kattegat and Sound: discordance between histology and visual inspection and evaluation of alternative criteria in maturity judgment.
- K:58 Poster *J. Portela, J. Wang, P. Brickle, M. Sacau, G. Pierce, X. Cardoso, E. Ulloa, M. Otero, and V. Tato*: Study of the variations of a potentially exploitable species (*Patagonotothen* spp.) in the southwest Atlantic, using GIS techniques
- K:59 Poster *J. Portela, P. Brickle, G. J. Pierce, J. Wang, , M. Sacau, and X. Cardoso*: Analysis of the spatio-temporal pattern of Southern blue whiting *Micromesistius australis* abundance in the bottom-trawl fisheries in the southwest Atlantic using GIS techniques
- K:60 Poster *R. Prellezo, Itziar Lazkano, M. Santurtún, P. Lucio, A. Iriondo, and I. Quincoces*: The use of catch profiles for defining the Basque trawl fisheries from 1996 onwards
- K:61 Poster *Carlos González-Salas, P. Lenfant, and P. Grellier*: Relationship between demographic and genetic structure of European anchovy populations (*Engraulis encrasicolus*, Linnaeus, 1758) in the Bay of Biscay
- K:62 Withdrawn
- K:63 Poster *Isabel González Herraiz, A.C. Fariña, and F. Velasco*: Spatial distribution patterns of *Nephrops norvegicus* on the Porcupine Bank (W Ireland)
- K:64 Poster *Øystein Varpe, Øyvind Fiksen, and Aril Slotte*: Building capital in a seasonal oceanic environment
- K:65 Poster *Domingas Cardoso, Maria Lourdes Godinho, and Cristina Morgado*: Growth Study of Pouting (*Trisopterus luscus* Linnaeus, 1758) in the Portuguese Continental Waters (ICES Div. IXa)
- K:66 Poster *H. de Pontual, A. L. Groison, and C. Piñeiro*: Do we need to revise growth estimation of European hake (*Merluccius merluccius*)?
- K:67 Poster *Teresa Moura, Leonel Serrano Gordo, Pedro Bordalo-Machado, Ivone Figueiredo and Maria de Fátima Borges*: Are caudal thorns adequate structures for ageing *Raja undulata*?
- K:68 Poster Withdrawn
- K:69 Poster *T. Vollen and O. T. Albert*: The third dimension of Greenland halibut distribution: Pelagic occurrence of this deep-water flatfish in relation to availability of pelagic prey
- K:70 Withdrawn
- K:71 Poster *Kumbi Kilongo Kilongo, P. Barros, and M. Diedhou*: Diet of large-eye dentex, *Dentex Macrophthalmus*, off Angola and Namibia
- K:72 Poster *Agnes C. Gundersen, Claus S. Simonsen, Ole Jørgensen, Bjarne Lyberth, and Jesper Boje*: Sexual maturation and spawning season of Greenland halibut, *R. hippoglossoides*, in West Greenland waters

- K:73 Poster *Jorge M.S. Goncalves, L. Bentes, P. Monteiro, R. Coelho, M. Corado, and K. Erzini*: Reducing discards in a demersal purse-seine fishery
- K:74 Poster *Mårten Åström, Håkan Wickström, and Jan Andersson*: Spawner escapement of the European eel (*Anguilla anguilla* (L.)) from the yellow eel fishery in Swedish coastal waters
- K:75 Poster *Patrícia Gonçalves, Narcisa Bandarra, Ana Costa, and Emília Cunha*: Evolution of the total lipids in muscle and gonads of hake (*Merluccius merluccius*, L. 1758) during gonadal development
- K:76 Poster *Silvana Acevedo, Julie M. Fives, and Christian Mohn*: Abundance and distribution of the larval stages of the mesopelagic fish *Maurolicus muelleri* (Gmelin, 1788) in relation to hydrography and currents off the west coast of Ireland
- K:77 Poster *Corina Chaves and Fátima Cardador*: Distribution and abundance patterns of Pouting (*Trisopterus luscus*) in Portuguese continental waters
- K:78 Poster *Feodor Litvinov and Sergey Kudersky*: Intra-range boundaries in western African elasmobranch species as a reason for stock unit delimitation
- K:79 Poster *Gavin Power*: Precision in age determination of blue whiting, (*Micromesistius poutassou*), within and between “readers”, using stereo-microscopy of sagittal otoliths under reflected light
- K:80 Poster *Porsteinn Sigurðsson and Vilhjálmur Þorsteinsson*: Underwater tagging of deep sea redfish. New technique for tagging fish at great depths
- K:81 Poster *Steve Cadrin and Azure D. Westwood*: The use of electronic tags to study fish movement: a case study with yellowtail flounder off New England
- K:82 Poster *S. Rodriguez, E. Navarro, and I. Ibarrola*: Interindividual variability of physiological components of growth in mussels *Mytilus edulis*

Baltic Sea Ecosystem Structure and Dynamics – Consequences of Physical and Anthropogenic Forcing (L)

- L:01 *Eero Aro and Maris Plikshs*: The ecosystem effects of Baltic cod (*Gadus morhua callarias* L.) abundance and distribution changes in 1977–2004: From top-down to bottom-up control
- L:02 *Hannes Baumann, Hans-Harald Hinrichsen, Fritz Köster, and Axel Temming*: A new retention index for the Central Baltic Sea: long-term hydrodynamic modelling used to improve Baltic sprat, *Sprattus sprattus*, recruitment models
- L:03 *Günther Nausch and Rainer Feistel*: Hydrographic and hydrochemical implications of stagnation and water renewing in the central Baltic Sea - the period 1992–2004
- L:04 *Sanna Rönkkönen, Sigrún Huld Jónasdóttir, Eveliina Lindén, Miina Karjalainen, and Markku Viitasalo*: Variations in the C, N, P and fatty acid composition of zooplankton in the Baltic Sea: implications to herring growth
- L:05 *E. Karasiova and V. Ivanovich*: Invasion and distribution of Cercopages pengoi in the Baltic Sea as an indicator of climatic changes
- L:06 *Stefan Neuenfeldt, Hans-Harald Hinrichsen, and Anders Nielsen*: A method to geolocate eastern Baltic cod by using Data Storage Tags (DSTs)
- L:07 *E. Karasiova and R. Voss*: Long-term variability of cod and sprat eggs abundance in ichthyoplankton of the Baltic Sea
- L:08 *M. Bleil and R. Oeberst*: Comparison of spawning activities in the mixing area of both the Baltic cod stocks, Arkona Sea (ICES sub-divisions 24) , and the adjacent areas in the recent years
- L:09 *Linda Fielder, Myron A. Peck, and Michael A. St. John*: The influence of temperature, salinity and feeding history on population characteristics of Baltic *Acartia tonsa*: Egg production, hatching success and cohort development
- L:10 *V.N. Feldman and F.A. Patokina*: Size-based interactions of the predators and the fish prey in the Eastern Baltic Sea
- L:11 Withdrawn

- L:12 *Jörg Dutz, Mohrholz, J. Peters, J. Renz, and J. Alheit*: Identification of critical stages in the population dynamics of a key copepod species in the Bornholm Basin (Baltic Sea): potential linkages to physical forcing and climate variability.
- L:13 *G. Kornilovs, C. Möllmann, L. Sidrevics, and V. Berzins*: Fish predation modified climate-induced long-term trends of mesozooplankton in a semi-enclosed coastal gulf
- L:14 Withdrawn
- L:15 Withdrawn
- L:16 *J. Hjelm, J. Simonsson, and M. Cardinale*: Spatial distribution of cod in the Baltic Sea in relation to abiotic factors
- L:17 *Maiju Lehtiniemi and Eveliina Lindén*: Intra-guild predation and competition of larval Baltic herring and littoral mysid shrimps
- L:18 *M. Bernreuther and D. Stepputtis*: Vertically resolved prey-selectivity of Baltic herring (*Clupea harengus* L.) and sprat (*Sprattus sprattus* L.)
- L:19 *Gerd Kraus, Volker Mohrholz, Rüdiger Voss, Miriam Dickmann, Hans-Harald Hinrichsen, and Jens-Peter Herrmann*: Consequences of summer inflow events on the reproduction cycle of Baltic sprat
- L:20 *Jasmin Renz and Hans-Jürgen Hirche*: Life of *Pseudocalanus acuspes* in the Baltic Sea
- L:21 *Dirk M. Mendedoht, J. van Beusekom, M. Boersma, H.J. Hirche, J. Schulz, and J.N. Schwarz*: Seasonal and spatial patterns of dominant phytoplankton groups in the Bornholm Basin (Baltic Sea): A comparison of in situ fluorescence profiles with a multispectrofluorometer and satellite data
- L:22 *Janna Peters, Jörg Dutz, Jasmin Renz, and Wilhelm Hagen*: On the nutritional condition and lipid composition of three different trophic level components (seston, copepods, sprat larvae) in the Bornholm Basin, Baltic Sea
- L:23 *D. Stepputtis*: Distribution of herring and sprat in the Baltic Sea in relation to physical features
- L:24 *Jens-Peter Herrmann, Myron A. Peck, Sven Stäcker, and Axel Temming*: Bioenergetics of post-larval Baltic sprat (*Sprattus sprattus* L.): Evidence for growth limitation at cold temperatures
- L:25 *Myron A. Peck, Catriona Clemmesen, Hannes Baumann, Jens-Peter Herrmann, Sven Stäcker, and Axel Temming*: The growth-feeding relationship in post-larval Baltic sprat (*Sprattus sprattus* L.): Comparison of somatic, nucleic acid- and otolith-based growth rates
- L:26 *J. van Beusekom, M. Boersma, M. Dibbern, D. Mendedoht, and M. Schilling*: Phytoplankton and nutrient dynamics in the Bornholm Basin 2002–2003 during the German GLOBEC Project
- L:27 *Christian Möllmann, Georgs Kornilovs, Marina Fetter, and Friedrich W. Köster*: Herring and sprat growth changes in the Central Baltic Sea
- L:28 *Christian Möllmann, Axel Temming, Hans-Jürgen Hirche, Daniel Stepputtis, Matthias Bernreuther, and Friedrich W. Köster*: Fish predation control of key copepod species in the Bornholm Basin
- L:29 *Friedrich W. Köster, Christian Möllmann, Hans-Harald Hinrichsen, Jonna Tomkiewicz, Kai Wieland, Gerd Kraus, Rüdiger Voss, Brian R. MacKenzie, Dietrich Schnack, Andrei Makarchouk, Maris Plikshs, and Jan E. Beyer*: Baltic cod recruitment – the role of physical forcing and species interaction
- L:30 Poster *E. Karasiova*: Long-term variability of peak egg abundance timing of Baltic cod in ichthyoplankton of the southeastern Baltic Sea
- L:31 Poster *Jan Schulz, Dirk Mendedoht, Miriam Dickmann, and Hans-Jürgen Hirche*: Ocean Sneaker's Tool: Data Converting – Processing – Visualization
- L:32 Poster *D. Stepputtis and E. Götze*: Bouyancy of physostomeous fishes in a severe stratified environment and its possible effects on vertical migration
- L:33 Poster *Christian Möllmann, Hans-Jürgen Hirche, Jörg Dutz, Jasmin Renz, and Jörn O. Schmidt*: Mortality rates of dominating calanoid copepods in the Bornholm Basin

Regime Shifts in the North Atlantic Ocean: Coherent or Chaotic? (M)

- M:01 *Harald Yndestad, William R. Turrell, and Vladimir Ozhigin*: Temporal linkages between the Faroe-Shetland time series and the Kola section time series
- M:02 *B. J. Rothschild*: The anatomy of regime shifts
- M:03 *John H. Steele and Jeremy S. Collie*: Regime shifts: some management aspects
- M:04 *Andrei Krovnin and G. Moury*: A comparison of climatic effects on North Atlantic and North Pacific fish stocks on the decadal and interannual time scales
- M:05 *Kenneth Sherman, John O'Reilly, and Joseph Kane*: Climate, ocean regimes and biomass yields of five North Atlantic large marine ecosystems
- M:06 *Jeremy S. Collie, John H. Steele, and Katherine Richardson*: Physical forcing and ecological feedbacks in marine regime shifts
- M:07 *Thomas Brunel and Jean Boucher*: Long term synchrony in variations of recruits production of the North Eastern Atlantic marine fish populations
- M:08 *L. Ciannelli, K. Bailey, K. Frank, D. Hjermann, G. Ottersen, and N. C. Stenseth*: Landscape ecology, spatial overlap, climate forcing and cod-capelin trophic interactions
- M:09 *J. Alheit, J. Dutz, R. Feistel, G. Kornilovs, C. Möllmann, V. Mohrholz, and N. Wasmund*: Parallel Regime shifts in Central Baltic and North Sea in 1988/89
- M:10 *Martin Dorn, Jennifer Boldt, Anne Hollowed, Jim Ianelli, and Tom Wilderbuer*: Management implications of low-frequency variability in marine fish survival patterns in the North Pacific
- M:11 *Maria de Fatima Borges and Louize Hill*: Regime shift effects on fish community metrics measured in the West Portugal Upwelling area
- M:12 *Webjørn Melle, Francisco Rey, Bjørnar Ellertsen, and Hein Rune Skjoldal*: Plankton biomass, production and variability in the Norwegian Sea ecosystem
- M:13 Withdrawn
- M:14 *Francisco P. Chavez*: Evidence for regime shifts in the Pacific Ocean
- M:15 Withdrawn
- M:16 Poster *G. M. Daskalov, L. Kell, and C. Fox*: Large-scale environmental effects on recruitment of commercially exploited fish stocks in the North Atlantic
- M:17 Poster *Marianne Holm*: Salmon in the Norwegian Sea

Oceanographic Processes Related to the Continental Slopes of the North Atlantic (N)

- N:01 *Antonina dos Santos and A. Peliz*: On the occurrence of *Nephrops norvegicus* larvae off south European Atlantic waters
- N:02 *Alexander Sirota, Pavel Chernyshkov, and Natalia Zhigalova*: Water masses distribution, currents intensity and zooplankton assemblage off Northwest African coast
- N:03 *Changsheng Chen and Geoffrey Cowles*: Interannual variability of water stratification and circulation in the Gulf of Maine/Georges Bank region
- N:04 *Steingrímur Jonsson and Hedinn Valdimarsson*: An ocean current over the continental slope northwest of Iceland carrying Denmark Strait overflow water from the Iceland Sea to Denmark Strait
- N:05 *V. Valencia, J. Franco, A. Borja, and A. Fontán*: Winter mixed layer in the continental slope of the South-eastern Bay of Biscay. Factors affecting the water mixed depth and resulting properties of the mixed waters
- N:06 *M. Ruiz Villarreal, G. Díaz del Río, A. Lavin, C. González-Pola, N. González, J. Alonso, M. Rodriguez, and J.M. Cabanas*: The impact of the Galician Bank in the Mediterranean Outflow

- N:07 *Denis Gilbert*: Propagation of temperature signals along the northwest Atlantic continental shelf edge and into the Laurentian Channel
- N:08 *Sarah L. Hughes and W.R. Turrell*: The slope current on the Shetland shelf of the Faroe-Shetland channel - statistics and trends
- N:09 *M. A. Qurban, D.J. Hydes, A. M. Lavin, C. M. González-Pola, B. A. Kelly-Gerreyn, and P. Miller*: Sustained "Ferry-Box" Ship of Opportunity observations of physical and biogeochemical conditions across the Bay of Biscay
- N:10 *Xavier Carton, Laurent Cherubin, and Jerome Paillet*: Interaction of two meddies with a cyclone in the Gulf of Cadiz
- N:11 *Xavier Carton, Marc Pavec, and Gordon Swaters*: Influence of time variability on the stability of a frontal slope current
- N:12 *Manuel Ruiz, Villarreal Guillermo Díaz del Río, Henrique Coelho, and Paulo Chambel*: Slope current in the Cantabrian: Seasonal variability and interaction with Aviles Canyon
- N:13 Poster *Carmen Rodríguez, Nicolás González, Alicia Lavín, Rosario Carballo, and Ana Abascal*: The seasonal cycles of temperature, salinity and nutrients in the Cantabrian Sea in 2001–2003

Larval Fish Growth, Feeding and Recruitment in Relation to Patterns and Activity in Plankton Communities (O)

- O:01 *H.-H. Hinrichsen, V. Buehler, and C. Clemmesen*: Larval growth characteristics of North Sea herring obtained from otolith analysis: an Individual Based Model (IBM) approach
- O:02 *Rüdiger Voss, Catriona Clemmesen, Hannes Baumann, and Miriam Dickmann*: Recruitment success in Baltic sprat: Coupling of food availability, larval condition and survival
- O:03 *Catriona Clemmesen, Hans-Harald Hinrichsen, Muklis Kamal, and Vivian Bühler*: Variability in growth and nutritional condition of sprat larvae in the Baltic - a combined field and biophysical modelling study
- O:04 *R. G. Lough and E. R. Broughton*: Fine- to micro-scale distribution of plankton based on Video Plankton Recorder profiles from Georges Bank with implications for larval fish feeding
- O:05 *Mari T. Breien and Howard I. Browman*: The three-dimensional prey field of *Meganctiphanes norvegica* and the escape responses of their copepod prey
- O:06 *Hans-Jürgen Hirche*: Annual and interannual variability of body size and population development of 4 dominant copepod species at Helgoland Roads, southern North Sea
- O:07 *J. Alheit, C. Clemmesen, M. Dickmann, A. Drossou, R. Hinrichs, M. Holtappels, B. Huwer, V. Mohrholz, M. Schilling*: Storm impact on clupeid larvae, their condition and their planktonic prey
- O:08 *Larry Buckley, E.G. Durbin et al.*: Annual and inter-annual trends in the zooplankton prey and growth of Atlantic cod (*Gadus morhua*) and haddock (*Melanogrammus aeglefinus*) larvae on Georges Bank
- O:09 *Bernard A. Megrey, Shin-ichi Ito, Douglas E. Hay, Robert Klumb, Kenneth A. Rose, and Francisco E. Werner*: Regional differences in lower and higher trophic level marine ecosystem response to climate impacts using a coupled biogeochemical-fisheries bioenergetics/population dynamics model
- O:10 *Gwang-Cheon Kim, John F. Dower, and Pierre Pepin*: Comparing the relative importance of early larval growth and length-at-age to measures of feeding success: Bigger is not necessarily better
- O:11 *Carolina Parada and S. Hinckley*: Ecosystem model of Shelikof Strait in the Gulf of Alaska: Sensitivity analysis of predation and grazing model parameters, and parameter estimation using data on *Neocalanus* spp. and *Pseudocalanus* spp
- O:12 Withdrawn
- O:13 Poster *Jens Rasmussen, Alejandro Gallego, Mike Heath, and Peter Boyle*: Multispecies diet composition and selectivity in a larval fish assemblage east of Shetland, May 1996.

- O:14 Poster *Peter S. Galbraith, Howard I. Browman, Roberto G. Racca, Anne Berit Skiftesvik, and Jean-François Saint-Pierre*: Energetics of foraging in Atlantic cod (*Gadus morhua*) larvae: effects of micro-scale turbulence
- O:15 Poster *Miriam Dickmann and J. Alheit*: Food and feeding of sprat larvae in the Baltic Sea
- O:16 Poster *M. Holtappels, J. Alheit, M. Bernreuther, C. Clemmesen, and R. Hinrichs*: Do sardine and sprat larvae in frontal systems of the North Sea suffer from starvation?
- O:17 Poster *Bastian Huwer, Moritz Holtappels, Catriona Clemmesen, and Volker Mohrholz*: Distribution and growth of sprat (*Sprattus sprattus*) and sardine (*Sardina pilchardus*) larvae co-occurring at frontal systems in the German Bight
- O:18 Poster *Trond Kristiansen and Øyvind Fiksen*: Temperature- and food-dependent growth of larval Atlantic cod (*Gadus morhua* L.): Simulation of a macrocosm experiment

Physical-biological Interactions: Experiments, Models and Observation (P)

- P:01 *A. Trofimov, V. Ivshin, and N. Mukhina*: Modelling of dynamic processes influencing the Barents Sea cod (*Gadus morhua morhua* L.) survival in early life history
- P:02 *Volker Mohrholz, Jörg Dutz, and Gerd Kraus*: The impact of exceptional warm summer inflow events on the environmental conditions in the Bornholm Basin
- P:03 *Jim Ellis, Simon Greenstreet, Mike Robertson, and Stuart Rogers*: Distribution and structure of faunal assemblages and their associated physical conditions on the Atlantic continental shelf of the British Isles
- P:04 *Enrique Nogueira, Antonio Bode, Manuel Varela, and Xosé Anxelu G. Morán*: Pentadal variability (2000–2004) of thermohaline properties and chlorophyll a distribution in the NW and N Iberian shelf during the winter-spring transition
- P:05 *A. Bucklin, C. A. Manning, K. M. Bonner, and J. M. Pringle*: Seasonal patterns of abundance and vertical distribution of copepod species in coastal waters of the western Gulf of Maine (Northwest Atlantic)
- P:06 *M. Sourisseau, Y. Simard, and F. J. Saucier*: Aggregation and advection of macro-zooplankton in the Estuary and Gulf of St-Lawrence
- P:07 *Luis Ferrer, M. González, U. Cotano, A. Uriarte, Y. Sagarminaga, Ad. Uriarte and M. Collins*: Physical controls on the evolution of the anchovy in the Bay of Biscay: a numerical approximation
- P:08 *G. Lacroix, C. Lancelot, K. Ruddick, Y. Spitz, and N. Gypens*: Modelling the relative impact of Rivers (Scheldt/Rhine/Seine) on the availability of nutrients in Belgian waters (Southern North Sea) using the 3D Coupled Physical-Biological Model MIRO&CO-3D
- P:09 *Alejandro Gallego, Mike Heath, and Belinda Cook*: The origin and destination of sandeel larvae sampled in the northern North Sea: bio-physical modelling simulation results
- P:10 Withdrawn
- P:11 *Lars Asplin, Karin Boxaspen, and Anne D. Sandvik*: Modelled distribution of sea lice in a Norwegian fjord
- P:12 *Thomas Torgersen and Øyvind Fiksen*: Vertical distribution of feeding- and mortality rates in oceanic systems
- P:13 *T. Bekkby, E. Rinde, R. Rosenberg, V. Bakkestuen, and L. Erikstad*: The effect of terrain structures and environmental factors on the distribution marine habitats
- P:14 *Christian Mohn, Martin White, Aike Beckmann, and Gareth Mottram*: The role of physical processes for biomass dispersion over submarine banks: a study at two locations in the Northeast Atlantic Ocean
- P:15 *B. J. Rothschild, C. Chen, G. Lough, and K. D. E. Stokesbury*: The influence of the Georges Bank wind index on the Scotian Shelf Gulf of Maine stocks of cod, haddock, and scallops
- P:16 *Beatriz Mouriño, E. Fernández, R. Pingree, B. Sinha, J. Escáñez, and D. de Armas*: Are mesoscale features important for the carbon budget of the photic layer in the NE subtropical Atlantic?

- P:17 Withdrawn
- P:18 Withdrawn
- P:19 *Jan Schulz and Hans-Jürgen Hirche*: Vertical distribution of zooplankton in relation to clines in the central Baltic Sea – Possible impacts
- P:20 *Tetjana Ross, Isabelle Gaboury, and Rolf Lueck*: Acoustic observations of plankton and turbulence in a tidally mixed fjord
- P:21 Withdrawn
- P:22 Withdrawn
- P:23 *W. J. Saumweber and E. G. Durbin*: Energetic constraints on the population dynamics of *Calanus finmarchicus* during diapause in the Gulf of Maine
- P:24 *E. W. North, M. Li, T. Gross, L. Zhong, and R. R. Hood*: The influence of mixing processes on larval transport in a stratified wind- and tidally-forced system
- P:25 Poster *Ken H. Andersen and Christian Möllmann*: Process oriented model of egg mortality due to the physical environment and predation
- P:26 *S. Vaz, A. Carpentier, C. Loots, and P. Koubb*: Modelling Fish Habitat Suitability in the Eastern English Channel; Application to community habitat level
- P:27 *Alain F. Vézina, B. Casault, and B. Greenan*: Physical-biological simulations of short-term variability in vertical mixing and phytoplankton on the Scotian shelf
- P:28 *B. A. Kelly-Gerreyn, M. A. Qurban, D.J. Hydes, P. Miller, and L. Fernand*: Coupled "Ferry-Box" Ship of Opportunity and satellite data observations of plankton succession across the European Shelf Sea and Atlantic Ocean
- P:29 Withdrawn
- P:30 *C. L. Johnson, J. M. Pringle, and C. S. Chen*: Transport and retention of the copepod *Calanus finmarchicus* during diapause in the deep Gulf of Maine
- P:31 *F. Peters, O. Guadayol, C. Marrasé, M. Bayer, A. Sabata, J. Felipe, and J. Egge*: An assessment of the annual variability in a coastal plankton community in relation to turbulence forcing and nutrient load
- P:32 Poster *Jesus M. Torres Palenzuela, Gemma Martinez Iglesias, and Luis Gonzalez Vilas*: Prestige effects on the catches of the pelagic fisheries in the Galician coast
- P:33 *Laure Pecquerie, Martin Huret, Pierre Petitgas, and Alain Ménesguen*: Use of coupled circulation and ecosystem NPZ models to characterise food conditions of anchovy in Biscay
- P:34 *Stéphanie Magri-Hoeltzener, Pierre Petitgas, and Pascal Lazure*: A 1-D model for the vertical distribution of fish eggs: sensitivity analysis and validation
- P:35 Poster *Andreas Moll, Johannes Pätsch, and Wilfried Kühn*: Zooplankton dynamics within the North Sea ecosystem: annual cycles and regional differences simulated with ECOHAM2
- P:36 Poster *A. Bucklin, E. Ünal, P. H. Wiebe, and N. J. Copley*: Interannual variation of population genetic diversity of *Calanus finmarchicus* (Copepoda, Calanoida) in the Gulf of Maine, Northwest Atlantic
- P:37 Poster *Wilfried Kühn, Myron A. Peck, Thomas Pohlmann, and Catriona Clemmesen*: A coupled transport/growth individual-based model for larval sprat (*Sprattus sprattus*) in the southern North Sea/German Bight
- P:38 Poster *S. de Juan, H. Hinz, M. Kaiser, A. Palanques, J. Guillén, A. de Biasi, P. Sartor, and M. Demestre*: Preliminary results of the effects of different levels of trawl fishing activity on benthos and sediment from fishing grounds in European waters (Irish Sea, Adriatic Sea and Mediterranean Catalan Sea)
- P:39 Poster *Cecilie Broms T. Årnes, Webjørn Melle, and Anders Thorsen*: Gastric evacuation rates of Norwegian spring spawning herring

- P:40 *Ken H. Andersen*: Modelling retention or dispersion of buoyant and active particles around a tidal front
- P:41 Poster *A. Carpentier, C. S. Martin, S. Vaz, F. Coppin, P. Koubbi, G. J. Meaden, M. Walkey, S. Harrop, Z. Kemp, N. Desroy, J. C. Dauvin, and A. Lefebvre*: Eastern Channel Habitat Atlas for Marine Resource Management (CHARM)
- P:42 Poster *C. S. Martin, A. Carpentier, F. Coppin, P. E. Eastwood, G. J. Meaden, M. Walkey, S. Harrop, Z. Kemp, and S. Vaz*: A Digital Atlas for the Physical Environment of Eastern English Channel (CHARM Project)
- P:43 Poster *P. H. Wiebe, R. P. Harris, O. S. Astthorsson, C. S. Werner, M.A. St. John, D. B. Haidvogel, F. Carlotti, and B. deYoung*: Basin-scale Analysis, Synthesis and INtegration (BASIN) of oceanographic and climate-related processes and the dynamics of plankton and fish populations in the North Atlantic Ocean (a Workshop)
- P:44 *Jesus M. Torres Palenzuela, Gemma Martinez Iglesias, and Louis Gonzalez Vilas*: Pelagic fisheries study using GIS and remote sensing imagery in Galicia (Spain)

Recent Advances in the Oceanography and Biology of the Iberian Waters and Adjacent Shelf Seas: Results from Integrated Multidisciplinary Projects (Q)

- Q:01 *Benjamin Planque, Edwige Bellier, and Pierre Petitgas*: Historical fluctuation of spawning area of anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*) in the bay of Biscay from 1967 to 2004
- Q:02 *Benjamin Planque, Edwige Bellier, and Pascal Lazure*: Effects of environmental factors on potential spawning habitat of small pelagic fish in the bay of Biscay
- Q:03 *Patricia Estévez-Blanco, Emilio Fernández, Antonio Bode, Francisco Castiñeira, Jorge Lorenzo, and Manuel Varela*: Primary production rates along the northwest Iberian coastal transition zone derived from fast repetition rate fluorometry (FRRF)
- Q:04 *Pedro Cermeño, E. Marañón, J. Rodríguez, E. Fernández, F. Jiménez, and L. Zabala*: Allometric deviation of phytoplankton metabolism and the energy flow through a coastal ecosystem
- Q:05 *Marta M. Varela and Antonio Bode*: Release of dissolved organic nitrogen (DON) by microbial populations in the NW Iberian Peninsula shelf and adjacent open-ocean Atlantic waters
- Q:06 *Y. Sagarmínaga, X Irigoien, A. Uriarte, M. Santos, L. Ibaibarriaga, P. Alvarez, and V. Valencia*: Characterization of the anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*) spawning habitats in the Bay of Biscay from the routine application of the annual DEPM surveys in the Southeast Bay of Biscay
- Q:07 *Antonio Bode, Pablo Carrera, Jorge Lorenzo, Carmela Porteiro, and M. Begoña Santos*: Natural abundance of stable nitrogen isotopes reflect changes in pelagic food webs and mobility of size classes of the north Iberian sardine (*Sardina pilchardus*)
- Q:08 *Antonio Bode, Jorge Lorenzo, Marco Amez, Luis Valdés, and Manuel Varela*: Low enrichment in stable isotopes of mesozooplankton suggest predominance of microbial food webs in the Mar Cantábrico (S Bay of Biscay)
- Q:09 *M.B. Santos, G.J. Pierce, A. López, J.A. Martínez, M.T. Fernández, E. Ieno, C. Porteiro, P. Carrera, and M. Meixide*: Variability in the diet of common dolphins (*Delphinus delphis*) in Galician waters 1991-2003 and relationship with prey abundance
- Q:10 *L. Ibaibarriaga, M. Santos, A. Uriarte, D. Borchers, C. Dixon, and S. Wood*: Application of Generalised Additive Models to the Daily Egg Production Method for the Bay of Biscay anchovy (*Engraulis Encrasicolous* L.)
- Q:11 *Andrés Uriarte, Pablo Carrera, Guillermo Boyra, Jim Churnside, Carla Scalabrin, and Vitor Marques*: Comparison between the performance in detecting fish from airborne Lidar and ship (Echosounder) devices. a study case in SW Europe (the Bay of Biscay and Atlantic waters of the Iberian Peninsula)

- Q:12 *Pablo Carrera, Manica, Dankert Skagen, José M. Bellido, Victor Marques, Alexandre Morais, Carmela Porteiro, and Yorgos Stratoudakis*: Analysis of the dynamics of the atlanto-Iberian sardine using combined catch at age data and acoustic estimates by area: the effect of the recruitment strength on the distribution area of sardine
- Q:13 Withdrawn
- Q:14 *Joachim Bartsch*: The influence of spatio-temporal egg production variability on the modelled survival of the early life history stages of mackerel (*Scomber scombrus*) in the eastern North Atlantic
- Q:15 *Alexandra Silva, M. Begoña Santos, Alexandre Morais, Pablo Carrera, Afonso Jorge, Eugenia Peleteiro, Bruno Caneco, and Carmela Porteiro*: Geographic variability in sardine maturity and growth within the Atlanto-Iberian stock area.
- Q:16 Withdrawn
- Q:17 *Luis Valdés and A. López-Urrutia*: Critical review of the Spanish capability in marine research and its representation in research projects, scientific journals and marine councils
- Q:18 *Victor Marques, Pablo Carrera, Alexandre Morais, Carmela Porteiro, Juan Miquel and Yorgos Stratoudakis*: Consistency of the Spanish and Portuguese spring acoustic surveys off the Iberian Peninsula
- Q:19 *Yorgos Stratoudakis, Steve Coombs, Tim Smyth, Jerom Costas, Concha Franco, Ana Lago de Lanzós, Alexandra Silva, Maria Begoña Santos, Paula Alvarez, and Maria Santos*: Sardine (*Sardina pilchardus*) spawning season in the North East Atlantic and relationships with sea surface temperature
- Q:20 *Benito Peleteiro, Ana Marçalo, Mercedes Olmedo, Pedro Pousão-Ferreira, Javier Sanchez, Susana Garrido, Carmela Porteiro, and Yorgos Stratoudakis*: Sardine tagging off the Iberian peninsula: laboratory experiments and operations at sea
- Q:21 *Panagiotis Kasapidis, Serge Planes, Veronique Laurent, Ricardo Quinta, Ana Teia, Philippe Lenfant, Stelios Darivianakis, Vasso Terzoglou, Giorgos Kotoulas, and Antonios Magoulas*: Stock discrimination and temporal and spatial genetic variation of sardine (*Sardina pilchardus*) in north eastern Atlantic, with a combined analysis of nuclear (microsatellites and allozymes) and mitochondrial DNA markers
- Q:22 Poster *Ana Miranda, G. Fernández, C. Eirín, and S. Lens*: Zooplankton composition, distribution and abundance in the Bay of Biscay and adjacent Atlantic waters from a cetacean sighting survey
- Q:23 Poster *J. P. Rubín and P. Mafalda Jr.*: Abnormal domination of *Sardinella aurita* in the ichthyoplankton community of the Gulf of Cádiz: related changes in the hydrologic and mezozooplanktonic structures
- Q:24 Poster *Paulino Lucio, Marina Santurtún, Iñaki Quincoces, and Ane Iriondo*: Spatial-temporal characterization of the Northern Hake landings and landings per unit effort of the Basque (Spanish) fleets, in the period 1992–2003
- Q:25 Poster *Valesca Pérez, Emilio Fernández, Antonio Bode, Pablo Carrera, Begoña Castro, Elvira Ceballos, Jorge Lorenzo, Marian Peña, Manuel Varela, and Marta María Varela*: Close coupling between phytoplankton size structure and sardine (*Sardina pilchardus*) biomass in frontal systems of the west coast of the Iberian Peninsula

New Developments in Fisheries Acoustics: Applications in Bottom Trawl Surveys and Multi-frequency Species Identification (R)

- R:01 *M. L. Zaferman and G. P. Tarasova*: Experiments on development of a method of Greenland halibut assessment with the use of underwater video
- R:02 Withdrawn
- R:03 *S. M. Kasatkina, P. S. Gasyukov, and V. F. Inanova*: Joint application of trawl and acoustic samples in demersal fishes assessment improvement
- R:04 *Steven Mackinson, Jeroen van der Kooij, and Suzanna Neville*: The fuzzy relationship between acoustic and trawl surveys

- R:05 *Suzanna Neville, Vidar Hjellvik, Steven Mackinson, and Jeroen van der Kooij*: Using artificial neural networks to combine acoustic and trawl data in the Barents and North Seas
- R:06 *Andrew S. Brierley, Bjørn E. Axelsen, and Christopher P. Lynam*: Pinging down the food web: multi-frequency acoustic discrimination of jellyfish and fish
- R:07 *Nils Olav Handegard and Dag Tjøstheim*: The effective swept volume of a bottom trawl
- R:08 *Rebecca Thomas, Tim Mulligan, Don Degan, Robert Kieser, Debby L. Burwen, and Guy Fleischer*: Discrimination of Single Fish by species based on Multi-frequency Split-beam Measurements
- R:09 Withdrawn
- R:10 *David Somerton and Paul vonSzalay*: Reducing the variance of trawl indices of abundance by incorporating between station measurements of near bottom acoustic backscatter
- R:11 *Paul G. Fernandes and M. Stewart*: Determining the quality of a multifrequency identification algorithm
- R:12 *Alicia Mosteiro, P.G. Fernandes, F. Armstrong, and S. Greenstreet*: A dual frequency algorithm for the identification of sandeel school echotraces
- R:13 *Angus M. Mair, Paul G. Fernandes, and Andrew S. Brierley*: Examination of North Sea plankton samples in relation to multifrequency echograms
- R:14 *Nicolas Bez M. Bouleau, V. Hjellvik, O.R. Godø, D. Reid, D. Beare, T. Greig, S. Mackinson, S.Neville, J. van der Kooij, Y. Vérin, J. Massé and M. Armstrong*: Insight on fish reaction to the presence of trawl from the comparison of acoustic data recorded during and between trawl stations
- R:15 *Rita Santos N. García-Núñez, and P.G. Fernandes*: An algorithm to distinguish echotraces of herring (*Clupea harengus*) from those of Norway pout (*Trisopterus esmarkii*)
- R:16 *Geir Pedersen, Rolf J. Korneliussen, and Egil Ona*: The relative frequency response, as derived from individually separated targets on cod, saithe and Norway pout
- R:17 *Tony Greig*: Fish in the dead zone: are there any whispers from the bottom?
- R:18 *Natalia Gorska, Egil Ona, and Rolf Korneliussen*: On acoustic multi-frequency species identification and separation of Atlantic mackerel, Norwegian spring spawn herring and Norway pout
- R:19 *W. Tesler, R. Kieser, and J. Preston*: Use of seabed classification methodology to obtain species information from fisheries acoustic data
- R:20 *R. J. Korneliussen, P. Fernandes, and E. Ona*: Acoustic identification of Atlantic mackerel
- R:21 Withdrawn
- R:22 *Anne Lebourges-Dhaussy and Johanna Ballé-Béganton*: Multifrequency multimodel zooplankton classification
- R:23 *O. R. Godø, V. Hjellvik, T. Greig, D. Beare, and J. V. D. Kooij*: Can subjective evaluation of echograms improve correlation between bottom trawl and acoustic densities?
- R:24 *Doug Beare, D. Reid, T. Greig, N. Bez, V. Hjellvik, O.R. Godo, M. Bouleau, J. van der Kooij, S. Neville, and S. Mackinson*: Positive relationships between bottom trawl and acoustic data
- R:25 *Bo Lundgren and J. Rasmus Nielsen*: Experiments for possible hydroacoustic discrimination of free-swimming juvenile gadoid fish by analysis of broadband pulse spectra as well as 3D fish position from video images and split beam acoustics
- R:26 *Verena M. Trenkel, Olav Rune Godø, Nils Olav Handegard, and Ruben Patel*: Studying the relationship between spatial fish distributions and trawl catches
- R:27 *Joaquin Gajate, R. Ponce, M. A. Peña, M. Iglesias, and P. G. Fernandes*: SIMFAMI database: an application of the Spanish software SIRENO
- R:28 *Mireille Bouleau and Nicolas Bez*: Testing various geostatistical models to combine bottom trawl catches and acoustic data
- R:29 Withdrawn

- R:30 *Jacques Massé, Pierre Petitgas, Claire Macher, and Pierre Beillois*: Use of a two-frequency school descriptor to characterise trawl efficiency
- R:31 *Kjell Kr. Olsen and Geir Antonsen*: Broad band echo signals used for species identification
- R:32 Poster *E. J. Simmonds, C. Zimmermann, E. Götze, S. Jansen, E. Torstensen, Bo Lundgren, D.G. Reid, S. Ybema, and A.S. Couperus*: ICES coordinated acoustic survey of ICES divisions IIIa, IV and Via (north). Improvements through stratified design and 2003 results
- R:33 Poster *Vidar Hjellvik, Olav Rune Godø, and Dag Tjøstheim*: Diurnal variation in acoustic densities: Why do we see less in the dark?
- R:34 Poster *Geir Pedersen, Ruben Patel, and Egil Ona*: Direct measurement of the effective acoustic deadzone volume on sloping bottom from split beam phase angles
- R:35 Poster *Nils Olav Handegard and Vidar Hjellvik*: A vessel specific bias in echo sounder recordings during trawling
- R:36 Poster *R. J. Korneliussen, N. Diner, Egil Ona, and P. Fernandes*: Recommendations for collection of acoustic multi-frequency data and consequences of school detection using different beam-widths
- R:37 Poster *J. Rasmus Nielsen and Bo Lundgren*: Hydroacoustic ex situ target strength measurements of free-swimming juvenile gadoids in relation to variations in 3D fish position and angular orientation obtained from synchronized video images
- R:38 Poster *R. J. Korneliussen, E. Ona, H.P. Knudsen, G. Lien, K. Røang, I. K. Eliassen, Y. Heggelund, and D. Patel*: Combined algorithms for detection of acoustic categories
- R:39 Poster *A. Lebourges Dhaussy, T. Knutsen, and R. J. Korneliussen*: Acoustic backscatter from zooplankton and fish explored through an optimised model framework
- R:40 Poster *Mireille Bouleau and Nicolas Bez*: Relationships between the vertical acoustic profiles and the species proportion caught in the trawl; development of a general model combining bottom trawl and acoustic data
- R:41 Poster *Espen Johnsen*: Integrating fishery dependent data and survey data to study temporal and spatial patterns of diurnal variation in catch rates of hake (*Merluccius capensis* and *M. paradoxus*)
- R:42 Poster *Eirik Tenningen*: First Test Results from the New Norwegian Lidar for Monitoring of Marine Resources
- R:43 Poster *Bjørn E. Axelsen and Rune Vabø*: Validation of multifrequency target strength measurements of Cape horse mackerel *Trachurus trachurus capensis* using a finite cylinder model

Use of Estuarine and Freshwaters Habitats and the way that Freshwater and Diadromous Fish use Them (S)

- S:01 *Tony Robinet, Andrew Moorek and Eric Feunteun*: Evidence for chemical vulnerability of diadromous salmonids and eels
- S:02 *Pascal Laffaille, Aurore Baisez, and Emilien Lasne*: Freshwater habitat of European eel
- S:03 *Etienne Prévost*: Pollution from fish farm effluents increase in-river mortality of adult Atlantic salmon prior to spawning
- S:04 *Guy Verreault, Pierre Dumont, and Yves Mailhot*: Habitat losses and anthropogenic barriers as a cause of population decline for American eel (*Anguilla rostrata*) in the St. Lawrence Watershed
- S:05 *Francis Juanes, Steve Gephard, and Ken Beland*: Long-term changes in migration timing of adult Atlantic salmon at the southern edge of the North American species distribution: local adaptation or a coast-wide response to environmental change?
- S:06 *America G. Valiente, E. Garcia-Vazquez, and F. Juanes*: Effects of global warming on Atlantic salmon sea-run timing at the southern edge of the European distribution
- S:07 *Jean-Luc Baglinière, Frédéric Marchand, and Vincent Vauclin*: Changes in recruitment of Atlantic salmon (*Salmo salar*) population in the River Oir (Lower Normandy, France): relationships with the characteristics of spawners and with the stream modification

- S:08 *R. Thiel, P. Riel, R. Neumann and H. M. Winkler*: Status of the anadromous twaite shad *Alosa fallax* (Lacépède, 1803) in German and adjacent waters of the Baltic Sea
- S:09 *Jeronimo de la Hoz*: Environmental conditions and Atlantic salmon restoration plan in rivers of Spain.
- S:10 *Anthony Acou, P. Boury, G. Gabriel, T. Robinet, A.-J. Crivelli, and E. Feunteun*: Relation between continental hydrosystems and silver eels reproductive potential: an analysis needed for eel stock management
- S:11 *R. Christopher Chambers, David A. Witting, and Isaac Wirgin*: Evidence of rapid local adaptation in an anadromous gadid, Atlantic tomcod (*Microgadus tomcod*), in response to industrial contaminants released into the Hudson River Estuary, USA
- S:12 *Nicola Tien and Willem Dekker*: Trend in eel habitat abundance in the Netherlands during the 29th century
- S:13 Poster *Yuri V. Gerasimov, Oleg M. Lapshin, and Michael N. Kovalenko*: The research of salmon migration intensity in estuarine part of the Bolshaya River (west part of Kamchatka peninsula) using survey set-net and hydroacoustical metho
- S:14 *V. M. Zelenkov, I. I. Studenov, Y. V. Gerasimov, and O. M. Lapshin*: The research of salmonids migrations in the lower and estuarine parts of Onega River (White Sea basin) with the use of hydroacoustic method
- S:15 Poster *Michael Ingemann Pedersen*: Downstream migration of radio tagged silver eels
- S:16 Poster Withdrawn
- S:17 Poster *Araitz Bilbao, Iker Azpiroz, Jaime Castellanos, Javier Franco, Félix Izco, Iñigo Mendiola, Esteban Puente, and Iñaki Urrizalki*: Development of an European eel (*Anguilla Anguilla*) monitoring plan in the Oria River basin (Basque country)
- S:18 Poster *Pauline Boury, A. Acou, T. Robinet, and E. Feunteun*: European eel presapwner production by the French largest river system : Loire and fishing mortality estimation
- S:19 Poster *Ahmed Yahyaoui and Naoual Chetto*: Synthesis of the Ecobiological data of eel (*Anguilla Anguilla* L. 1758) in Marocco
- S:20 *M. L. Acolas, V. Véron, H. Jourdan, M.L. Bégout Anras, M.R. Sabatié, and J.L. Baglinière*: Assessment of upstream migration and reproductive behaviour of Allis Shad (*Alosa alosa* (L.)) from a small river of the Atlantic coastal zone (L'Aulne, Brittany, France).

Acoustic Seabed Classification – Applications in Fisheries Science and Ecosystem Studies (T)

- T:01 *D.V. Holliday, Charles F. Greenlaw, Jan E.B. Rines, and David Thistle*: Diel variations in acoustical scattering from a sandy seabed
- T:02 *Paul D. Eastwood, Sami Souissi, Stuart I. Rogers, Roger A. Coggan, and Craig. J. Brown*: Mapping sediment biotopes as continuous distributions rather than discrete entities with hard boundaries
- T:03 *Silvana N.R. Birchenough Siân, E. Boyd, Roger A. Coggan, David S. Limpenny, William J. Meadows, and Robert Foster-Smith*: Integration of ground-truthing approaches to haracterise an area licensed for dredge material disposal off the Northeast coast of the UK
- T:04 *Roger A. Coggan, Sally Philpott, David S. Limpenny, William J. Meadows and Siân E. Boyd*: Developing a strategy for seabed mapping at different spatial scales and resolutions: case study of seabed characterisation in an area of the eastern English Channel
- T:05 *Patrick Schneider, J. Burczynski, and B. Sabol*: Case studies for the evaluation of Submersed Aquatic Vegetation (SAV) using hydroacoustics as a dedicated assessment tool
- T:06 *Jeroen van der Kooij, Steven Mackinson, Adam Nicholls, and David Righton*: Assessment of sandeel distribution and abundance: a seabed discrimination approach
- T:07 *R.C. Wakeford, M. Belchier, and P. Morris*: Longline Fishing Activity and Bathymetry in the South Georgia Region

- T:08 Withdrawn
- T:09 *Katrina Baxter, A. Bickers, and G. Kendrick*: Classifying marine habitats using geophysical parameters
- T:10 Withdrawn
- T:11 *Rudy Kloser, Alan Williams, Franzis Althaus, and Alan Butler*: Seabed terrains and fauna associations based on acoustic sampling.
- T:12 Withdrawn
- T:13 *J. M. Preston, A. C. Christney, W. T. Collins, R. A. McConnaughey, and S. Syrjala*: Considerations in large-scale acoustic seabed characterization for mapping benthic habitats
- T:14 Withdrawn
- T:15 *Alan Williams, Rudy Kloser, and Bruce Barker*: Mapping, understanding and managing fishery habitat: a case study of the commercial pink ling (*Genypterus blacodes*: Ophidiidae) off SE Australia
- T:16 Poster *R.C. Wakeford, J.M. Clark, M. Belchier, and P. Morris*: Mapping deep-water benthic habitats around South Georgia
- T:17 Poster *Mattias Sköld, Tomas Lundälv, and Per Nilsson*: Forum Skagerrak II. Seabed mapping and biological groundtruthing of habitats on the Swedish west coast
- T:18 Poster *Estelle Hutin, Y. Simard, and P. Archambault*: Acoustic detection of a scallop bed from a single-beam echosounder
- T:19 Poster *Ibon Galparsoro, P. Gyssels, P. Liria, Z Santiago, and A. Uriarte*: Seabed acoustic characterisation of the bay of La Concha, San Sebastian (North-east of Spain) as a tool for coastal management

Mariculture in the Coastal Zone: Sustainability, Perspective and Limitations (V)

- V:01 Withdrawn
- V:02 *I. M. Davies, M Gubbins, and C. Greathead*: Relative rates of discharge of nutrients by cultivated finfish species
- V:03 *Jan Aure, T. Strohmeier, Ø. Strand, and L. Asplin*: Enhancement of mussel culture by artificial upwelling of nutrient-rich deep water in fjords
- V:04 *A. D. McIntosh, G Grewar, I. M. Davies, and C. F. Moffat*: Kinetics of depuration of hydrocarbons by mussels (*Mytilus edulis*)
- V:05 *I. M. Davies, U. Barg, and E. Black*: GESAMP initiative on environmental risk analysis for coastal aquaculture
- V:06 *I. M. Davies, M. J. Gubbins, and C. Greathead*: Relative importance of aquaculture, land run-off and tidal exchange as sources of nutrients in Scottish sea lochs
- V:07 *Per Dolmer and Kerstin Geitner*: Integrated Coastal Zone Management of cultures and fishery of mussels in Limfjorden, Denmark
- V:08 Poster *Pauline Kamermans, Maarten de Kort, Renee Quist, and Ad van Gool*: Production of algal feed for bivalve larvae with the use of water from a turbot farm
- V:09 Poster *I. Ibarrola and J. Guerra Rivas*: Feeding, absorption and digestion of detritus derived from different vascular plants and macroalgae by cockles
- V:10 Poster *Elizabeth Smith, Jennifer Graham, Matthew Gubbins, Marie Grieve, and Lesley Stobo*: Rapid monitoring of toxic phytoplankton in Scottish coastal waters
- V:11 Poster *Marina Andrea Kroeck, I. Arzul, J. Montes, R. F. Conchas, B. Chollet, E. M. Morsan, and F. Berthe*: Presence of *Bonamia*-like microcells in flat oyster, *Ostrea puelchana* (d'Orbigny, 1842) from San Matías Gulf, NW Patagonia, Argentina

- V:12 Poster *Pippa J. Sammes and C. Greathead*: Early warning systems to mitigate impacts of algal blooms and jellyfish on mariculture developments
- V:13 Poster *C. Greathead, M. Gubbins, and I. M. Davies*: Locational guidelines for marine fish farms in Scottish waters (spatial and temporal planning)

Conserving Biodiversity and Sustaining Fisheries through MPAs (Y)

- Y:01 *Paul J. B. Hart, Robert E Blyth, Michel J Kaiser, and Gareth Edwards-Jones*: The conservation effects of a gear restriction agreement off the south west coast of England
- Y:02 *Steven Murawski, Michael Fogarty, Susan Wigley, Paul Rago, and David Mountain*: Adaptive responses by fishermen to marine protected areas in temperate seas
- Y:03 Withdrawn
- Y:04 Withdrawn
- Y:05 *C. Mills, S. I. Rogers, M.L. Tasker, P.D. Eastwood, and G.J. Piet*: Developing the use of satellite Vessel Monitoring System data in spatial management.
- Y:06 *Edward D. Houde*: Spatial management, protected areas, and fisheries ecosystem planning in Chesapeake Bay
- Y:07 *G. Stefansson and A.A. Rosenberg*: Combining control measures for more effective management of fisheries under uncertainty: quotas, effort limitation and protected areas
- Y:08 *Raquel Goñi, A. Quetglas, and O. Reñones*: Influence of a marine reserve on catches and effort in the adjacent fishery of the European spiny lobster (*Palinurus elephas*, Fabricius, 1787)
- Y:09 *Hilaire Drouineau, Stéphanie Mahévas, Dominique Pelletier, and Benoît Beliaeff*: Assessing the impact of marine protected areas on the Hake-*Nephrops* fishery of the bay of Biscay using ISIS-Fish
- Y:10 Poster *Jeremy S. Collie, Rebecca G. Asch, and Page C. Valentine*: Biomass in the bank: reserve effects on the benthic fauna inside a closed area
- Y:11 *Jennifer S. Ashworth, Ayman Mabrouk, and R.F. G. Ormond*: How trophic interactions can cause second-order effects of marine reserves
- Y:12 *Joachim Claudet, G. Criquet, D. Pelletier, J.-Y. Jouvenel, and F. Bacher*: Multispecies-based indicators to assess the effectiveness of marine protected areas (MPAs) on rocky reef fish assemblages: an application to a northwestern Mediterranean case study
- Y:13 *Marion Verdoit-Jarraya, J.-L. Gouzé, and D. Pelletier*: Modelling spatial and seasonal dynamic of the whiting population in the Celtic Sea
- Y:14 *Aitor Forcada, Just T. Bayle, Pablo Sánchez, Carlos Valle, and Alfonso A. Ramos*: Assessment of the effects of protection on fish assemblages in MPAs: a multi-scaling approach
- Y:15 *David M. Kaplan*: Spacing and configuration of marine reserve networks
- Y:16 *John Meyer and James Byers*: Food web structure and the strength of trophic interactions in the Western Gulf of Maine Closure Area
- Y:17 Poster *Bryce Beukers-Stewart, Belinda J. Vause, Matthew W. J. Mosley, and Andrew R. Brand*: Evidence for larval export of scallops from a small closed area off the Isle of Man
- Y:18 Poster *E. Roldán, O. Reñones, X. Mas, O. Villagrana, and R. Goñi*: Evolution of Masía Blanca Marine Reserve (NW Mediterranean, Spain).
- Y:19 Poster *D. Alvarez-Berastegui, J. Amengual-Ramis, M. Valls, J. Moreno-Perez, O. Reñones, S. Adlerstein, and R. Goñi*: Biomass export from marine protected areas (MPAs) and the fisheries at the Cabrera Archipelago National Park
- Y:20 Poster *Joachim Claudet, P. Lenfant, D. Pelletier, J.-A. García-Charton, J.-Y. Jouvenel, and M.-L. Licari*: The need of implying habitats for the assessment of the effectiveness of Marine Protected Areas (MPAs) on temperate rocky fish assemblages

- Y:21 Poster *Géraldine Criquet, Joachim Claudet, and José-Antonio Garcia Charton*: Indicators to assess MPAs effectiveness: an approach based on commercial fisheries and Underwater Visual Census in a northwestern Mediterranean case study
- Y:22 Poster *Aitor Forcada, Patrick Bonhomme, Carlos Valle, Gwenaël Cadiou, and Jose Luis Sánchez-Lizaso*: Fish Biomass gradients from marine protected areas: assessments of the effects of protection on local fisheries catches.
- Y:23 Withdrawn
- Y:24 Poster *Ewan Hunter, Fiona Berry, Ainsley A. Buckley, Christie Stewart, and Julian D. Metcalfe*: Seasonal migration of thornback rays and implications for closure management

How Useful are Biological Effects Measurements in Marine Ecosystem Management? (Z)

- Z:01 *Kevin V. Thomas, J. Balaam, Y. Chan-Man, M. R. Hurst, J. E. Thain*: The use of in vitro bioassays and bioassay-directed analysis/TIE in Marine Ecosystem Management
- Z:02 *John E. Thain, S Feist, S.George, M. Gubbins, B. Lyons, A. MacIntosh and R. Reynolds*: The role of biomarkers in the UK National Monitoring Programme
- Z:03 *J. E. Thain and Yvonne T. Allen*: Sediment bioassays and their use in managing the disposal of dredged material in the marine environment
- Z:04 *Dorota Napierska, Magdalena Podolska, and Eugeniusz Andrulowicz*: Usefulness of enzyme activity measurements in flounder *Platichthys flesus* from the Polish coastal area of the Baltic Sea as a biomarker of chemical contamination
- Z:05 *Leili Järv, Mart Simm, and Ott Roots*: Quality criteria for DDT and HCH in Estonian coastal sea perch (*Perca fluviatilis* L.) as a source for changes in fisheries management and price policy in the future
- Z:06 *M. J. Gubbins, M O'Reilly, L. McIlroy, J. Thain, and I. M. Davies*: A decade of UK organo-tin-specific biological effects monitoring -trends, ecological quality assessment and future monitoring requirements.
- Z:07 Withdrawn
- Z:08 *Ketil Hylland*: Are biological effects measurements and risk assessment compatible?
- Z:09 *Ketil Hylland*: Assessing the impact of effluents from offshore activities by their biological effects – local and regional scales
- Z:10 *Ketil Hylland, Eivind Bøe, Anders Ruus, Knut-Erik Tollefsen, Torsten Källqvist, Thomas Hartnik, John E. Thain, and Anita Evenset*: Biological effects in sediment risk assessment and management
- Z:11 Poster *S. O'Neill and S. Ripp*: Contribution of a sea-going microbial biosensor to the management of environmental contamination by small chain PAHs
- Z:12 Poster *M. J. Gubbins, L. Lawton, B. T. G. Gowland, I. M. Davies, C. F. Moffat*: Biological effects of fish farm chemotherapeutants on non-target marine crustaceans - A potential monitoring tool for regulators?
- Z:13 Poster *S. O'Neill, A Craig, and S.Ripp*: Detecting hydrocarbon taint in fish

Cold Water Corals and Structural Habitats in Deep Water: Biology, Threats and Protection (AA)

- AA:01 Withdrawn
- AA:02 Withdrawn
- AA:03 Withdrawn

- AA:04 *Robert J. Brock, R. George, and L. Watling*: The 3rd International Symposium on Deep-Sea Corals – the world comes to tropical Miami to discuss coldwater corals and other deep-sea habitat and associated fauna
- AA:05 *Martha S. Nizinski, Steve W. Ross, and Kenneth J. Sulak*: Macrofaunal structure and habitat utilization within deep coral bank communities on the southeastern United States slope
- AA:06 *Robert Y. George*: *Lophelia* bioherms and lithoherms as fish habitats on the Blake Plateau: Biodiversity and Sustainability”
- AA:07 *Anthony Grehan, V. Unnithan, A. Wheeler, X. Monteys,, T. Beck, M. Wilson, J. Guinan, J. H. Spencer, A. Foubert, M. Klages, and J. Thiede*: Evidence of major fisheries impact on cold-water corals in the deep waters off the Porcupine Bank, west coast of Ireland: are interim management measures required?
- AA:08 *Jan Helge Fosså, Alvsvåg and Pål B. Mortensen*: Status of mapping and management of cold-water coral reefs in Norway
- AA:09 *A. A. Rowden, M. R. Clark, and S. O’Shea*: The influence of deepwater coral habitat and fishing on benthic faunal assemblages of seamounts on the Chatham Rise, New Zealand
- AA:10 *Pål Buhl Mortensen and Jan Helge Fosså*: Species diversity and spatial distribution of invertebrates on *Lophelia* reefs in Norway
- AA:11 Poster *Lene Buhl-Mortensen and Pål B. Mortensen*: Distribution and diversity of species associated with deep-water gorgonian corals off Atlantic Canada
- AA:12 *Kenneth J. Sulak, Steve W. Ross, and Martha S. Nizinski*: *Lophelia pertusa* landscapes and megafaunal biotopes on the Blake Plateau off the southeastern U.S.

Cephalopod Stocks: Review, Analysis, Assessment, and Sustainable Management (CC)

- CC:01 *Jaime Otero Villar, A. F. González, A. Guerra, M. Regueira, and M. E. Garci*: Reproductive biology of *Octopus vulgaris* in an upwelling area (NE Atlantic)
- CC:02 *Hideaki Kidokoro and Ken Mori*: Stock assessment methods and management procedure of *Todarodes pacificus* in Japan
- CC:03 *Anna Di Cosmo, Marina Paolucci, and Carlo Di Cristo*: Progesterone and 17 β -estradiol involvement in the yolk protein synthesis in the ovary of *Octopus vulgaris*
- CC:04 *A. M. Costa and J. Pereira*: Long-time conservation of biological structures as a possible solution for time-series preservation
- CC:05 *S. Lourenço and J. Pereira*: Abundance of the common octopus (*Octopus vulgaris*) and sea surface temperature off the Portuguese coast
- CC:06 *Ch.M. Nigmatullin*: Estimation of biomass, production and fishery potential of ommastrephid squids in the World Ocean and problems of their fishery forecasting
- CC:07 Poster *E. Le Bihan, C. Zatylny, A. Perrin, and N. Koueta*: Studies of post-mortem evolution of cuttlefish viscera during their storage at two different temperatures
- CC:08 *J. Sendão, P. Calixto, and T.C. Borges*: Behaviour of the common octopus (*Octopus vulgaris*) towards entrapment fishing gears: clay and plastic pots (“alcatruzes”) and iron traps (“covos”)
- CC:09 *Rui Rosa, João Pereira, and Maria L. Nunes*: Biogeography, biology and biochemistry of the deep-sea cirrate octopus *Opisthoteuthis* from the Portuguese continental slope
- CC:10 *Ch.M. Nigmatullin, A.V. Zimin, and A.Z. Sundakov*: The stock and fishery variability of the Argentine squid *Illex argentinus* in 1982-2004 related to environmental conditions
- CC:11 *N.Koueta, E. Le Bihan E., and A. Perrin*: Effect of amino acid on isolated cells of digestive gland of cuttlefish *Sepia Officinalis*
- CC:12 Poster *X. Mas, O. Reñones, and R. Goñi*: Cuttlefish trammel net artisanal fishery in the Balearic Islands (Western Mediterranean)
- CC:13 *M.Sacau, J. Wang, A. I. Arkhipkin, J. Portela, G. J. Pierce, Paul Brickle, and X. Cardoso*: The spatio-temporal pattern of Argentine shortfin squid *Illex argentinus* abundance in the Spanish bottom-trawl

fishery in the southwest Atlantic

- CC:14 *Frank Melzner, C. Bock, and H.-O. Pörtner*: Coordination of ventilation and circulation in the cuttlefish *Sepia officinalis* (L.) in the light of an oxygen limitation of thermal tolerance
- CC:15 *Abdelmalek Faraj and Nicolas Bez*: Advantages and limits of the direct approach for the octopus stock assessment, geostatistical approach
- CC:16 *Pedro R. Costa, Rui Rosa, João Pereira, and Maria A. M. Sampayo*: Detection of domoic acid, the amnesic shellfish toxin, in the digestive gland of *Eledone cirrhosa* and *E. moschata* (Cephalopoda, Octopoda) from the Portuguese coast
- CC:17 *Abdelmalek Faraj and Nicolas Bez*: Spatial pattern of the octopus life cycle in the South Atlantic of Morocco
- CC:18 Poster *Marina Santurtún, Yolanda Sagarminaga, Paulino Lucio, Ibon Galparsoro, Iñaki Quincoces, and Ane Iriondo*: Intrannual trends in catches of squid (*Loligo spp.*) in the Bay of Biscay (ICES Div. VIIIa, b, d) during 2000 in relation to oceanographic features
- CC:19 *E. Lefkaditou, J. Haralabous, D. Sarikas, S. Karamelidou and S. Kavadas*: The cephalopods in the small-scale fishery in the eastern Thracian Sea (NE Mediterranean)
- CC:20 *Ana Moreno, João Pereira, and Manuela Morais da Cunha*: The effect of time of hatching in age and size at maturity of *Loligo vulgaris*
- CC:21 *Rui Rosa, João Pereira, Pedro R. Costa, and Maria L. Nunes*: Distribution, abundance, biology and biochemical profile associated to sexual maturation of the Stout bobtail squid *Rossia macrosoma* from the Portuguese coast
- CC:22 *L. Challier, J. Royer, G. J. Pierce, N. Bailey, B. A. Roel, and J. P. Robin*: Preliminary analysis of stock-recruitment relationships in the English Channel squid *Loligo forbesi*
- CC:23 Poster *M. Thomas, L. Challier, M. B. Santos, G. J. Pierce, A. Moreno, J. Pereira, M. M. Cunha, F. Porteiro, J. Gonçalves, and J. P. Robin*: Spatial differences in biological characteristics of *Loligo forbesi* (Cephalopoda Loliginidae) in the Northeast Atlantic.
- CC:24 *L. Challier, M. R. Dunn, and J. P. Robin*: Trends in age-at-recruitment and juvenile growth in the English Channel cuttlefish *Sepia officinalis*
- CC:25 *Erica A. Vidal, Dominique P. Ibbotson, and Edward J. Buskey*: Factors affecting the encounter and feeding rates in squid paralarvae
- CC:26 Poster *A. R. G Tomás, M. A. Gasalla, B. G. Loyo, and C. A. Marques*: Cephalopods in the trawl fisheries in the southeastern Brazil (1979–2000)
- CC:27 Poster *Acácio R.G Tomás, Antônio O Ávila-da-Silva, and Gastão C.C Bastos*: Pot fishery for octopus, an alternative for trawling in São Paulo State coast, southeastern Brazil
- CC:28 *G. Stowasser, G. J. Pierce, C. Moffat, and M. A. Collins*: Ontogenetic changes in the diet of *L. forbesi*: insights from fatty acid and stable isotope analysis.
- CC:29 *A. Guerra, A. F. González, and F. Rocha*: A review of records of giant squid in the north-eastern Atlantic and severe injuries in *Architeuthis dux* stranded after acoustic exploration
- CC:30 *J. M. Smith, G. J. Pierce, A. F. Zuur, and P. R. Boyle*: Patterns of investment in reproductive and somatic growth in *Loligo forbesi*
- CC:31 *G. J. Pierce, P. R. Boyle, A. Zuur, and J. M. Smith*: Interannual variation in life-cycle characteristics of *Loligo forbesi*
- CC:32 Poster *P. R. Boyle, G. J. Pierce, L. C. Hastie, J. Wang, M. B. Santos, J. P. Robin, and P. Jereb*: Review of variation in the life-cycle of *Loligo forbesi* across its range
- CC:33 Poster *I. A. G. Young, G. J. Pierce, J. Wang, P. R. Boyle, J. M. Smith, and N. Bailey*: The Moray Firth directed squid fishery
- CC:34 *C.-S. Chen, G. J. Pierce, J. Wang, P. R. Boyle, N. Bailey, J.-P. Robin, and I. Sobrino*: The disappearance of *Loligo forbesi* from the south of its range in the 1990s
- CC:35 *S. Seixas, P. Bustamante, and G. J. Pierce*: Interannual patterns of variation in concentrations of trace elements in arms of *Octopus vulgaris* in two localities on the Portuguese coast

- CC:36 *Rubén Roa and Alexander Arkhipkin*: Approaches to short-term and long-term stock assessment of *Loligo gahi* around the Falkland Islands
- CC:37 Poster *Karsten Zumholz and Uwe Piatkowski*: New data on the biology of the Lesser Flying Squid, *Todaropsis eblanae* (Cephalopoda, Ommastrephidae) in the North Sea
- CC:38 Poster *Karsten Zumholz, Uwe Piatkowski, and Thor H. Hansteen*: Statolith trace element distributions in response to a manipulated environment in cuttlefish (*Sepia officinalis*)
- CC:39 Poster *Erica A. G Vidal, Vivian Hackbart, and Mike J. Roberts*: Rearing, yolk absorption and growth in *Loligo vulgaris reynaudii* paralarvae

Mortality and Linkages between Fish Eggs/Larvae and their Predators in Marine Ecosystems – A Multidisciplinary Approach (DD)

- DD:01 *Dariusz Fey, J. Hare, and E. Laban*: Growth-mortality hypothesis evaluation for Atlantic menhaden (*Brevoortia tyrannus*) larvae
- DD:02 *Aril Slotte, Nina Mikkelsen, and Harald Gjøsæter*: Egg cannibalism in Barents Sea capelin in relation to a narrow spawning distribution
- DD:03 *Maria Fossheim, M. Zhou, A. Edvardsen, and K. S. Tande*: Biological interactions in zooplankton explored by OPC data
- DD:04 *Ole-Petter Pedersen, M. Zhou, and K.S. Tande*: Semi-stable retention areas on the coast of Northern Norway
- DD:05 *Elvar H. Hallfredsson and Torstein Pedersen*: Effects of predation from juvenile herring on mortality rates of capelin larvae in the Barents Sea
- DD:06 *Dag Slagstad*: Drift patterns of capelin larvae based on field data and simulated fields from high resolution model off Finmark
- DD:07 *Juan Zwolinski, Evan Mason, Álvaro Peliz, Paulo Oliveira, and Yorgos Stratoudakis*: Use of the continuous underwater fish egg sampler (CUFES) to study the small scale distribution of sardine (*Sardina pilchardus*) egg patches.
- DD:08 *Ronny A. Jakobsen, Torstein Pedersen, and Erlend Moksnes*: Growth and age distributions of capelin (*Mallotus villosus*) larvae in the Barents Sea investigated by otolith increment analysis
- DD:09 *Trond Ivarjord, Torstein Pedersen and Erlend Moksnes*: Do capelin larvae deposit daily increments in their otoliths?
- DD:10 *Kjell R. Andersen, Elvar Hallfredsson, and Torstein Pedersen*: Prey recognition of capelin (*Mallotus villosus*) larvae in juvenile cod (*Gadus morhua* L.) stomachs
- DD:11 *M. A. Barbieri, J. Córdova, M. Espejo, F. Gerlotto, and E. Yáñez*: Spatial spawning strategy of Jack Mackerel (*Trachurus symmetricus murphyi*) off the Central-South region of Chile
- DD:12 *Kim Præbel, Jørgen S. Christiansen, and Svein-Erik Fevolden*: Spawning habitat and egg mortality in capelin (*Mallotus villosus*) - responses to extreme abiotic conditions
- DD:13 *Ignacio Olaso, P. Abaunza, B. Villamor, A. Lago, C. Porteiro, , C. Franco, J.R. Perez and F. Velasco*: Mackerel egg predation by cannibalism during the spawning season
- DD:14 Poster *Norbert Rohlf*: In-situ studies on the small-scale distribution of capelin larvae (*Mallotus villosus*)
- DD:15 Poster *Torstein Pedersen, Kurt Tande, Svein Erik Fevolden and Jørgen Schou Christensen*: Capelin and Herring in the Barents Sea – Coexistence or Exclusion (BASECOEX)

Stock Identification Methods (EE)

- EE:01 *Cornelius Hammer and Christopher Zimmermann*: The role of stock identification in formulating fishery management advice
- EE:02 *Kevin D. Friedland and Steven X. Cadrin*: Analyses of calcified structures-texture and spacing patterns

- EE:03 *Catherine G.J. Michielsens, M-L. Koljonen, and S. Mäntyniemi*: The use of genetic stock identification results for the assessment of wild Baltic salmon stocks
- EE:04 *Steve Cadrin, Kevin D. Friedland, and John Waldman*: Stock identification methods: from working group to book
- EE:05 *Steve Cadrin and Kevin D. Friedland*: Morphometric stock identification
- EE:06 *Ken MacKenzie and Pablo Abaunza*: Parasites as biological tags
- EE:07 *Ann-Britt Florin and T. Aho*: Stock identification and genetic variation of fishes in the Baltic Sea
- EE:08 *Marja-Liisa Koljonen*: Changes in stock composition of annual Atlantic salmon catches in the Baltic Sea on basis of DNA-microsatellite data and Bayesian estimation
- EE:09 *Jon Brodziak*: Maximum likelihood estimation of stock composition
- EE:10 Withdrawn
- EE:11 *G. Blanco, Y. Borrell, E. Cagigas, E. Vázquez, and J. A. Sánchez*: The genetic tools in stock identification
- EE:12 Withdrawn
- EE:13 *Mary C. Fabrizio*: Experimental design and sampling strategies for mixed stock analysis
- EE:14 *Ana G. F. Castillo and E. Garcia-Vazquez*: Fine spatial structure of Atlantic hake (*Merluccius merluccius*) stocks revealed by variation at microsatellite loci
- EE:15 *A. Murta et al.*: Using artificial neural networks for the stock delimitation of horse mackerel (*Trachurus trachurus*)
- EE:16 *Rebekka Varne and Jarle Mork*: Blue whiting (*Micromesistius poutassou*) stock components in samples from the northern Norwegian Sea and Barents Sea, winter 2002
- EE:17 Withdrawn
- EE:18 *O. Grahl-Nielsen*: Fatty acid profiles as natural marks for stock identification
- EE:19 *P. Abaunza, A. Murta, S. Mattiucci, R. Cimmaruta, G. Nascetti, A. Magoulas, A. Sanjuan, S. Comesaña, K. MacKenzie, J. Molloy, A. T. Santos, S. Iversen, G. Dahle, L. Gordo, C. Stransky, C. Zimmermann, M. T. Santamaria, P. Ramos, R. Quinta, A. L. Pinto, A. Ruggi, and N. Campb*: Stock discrimination of horse mackerel (*Trachurus trachurus*) in the Northeast Atlantic and Mediterranean Sea: integrating the results from different stock identification approaches
- EE:20 *Héila Macara, R. Duarte, and C. Morgado*: An approach to population homogeneity of hake (*Merluccius merluccius* L.) of the Portuguese continental coast attending to morphometric and physiologic characteristics
- EE:21 Withdrawn
- EE:22 *Rafael Duarte, I. Bruno, I. Quincoces, A.C. Fariña and J. Landa*: Morphometric and meristic study of white and black anglerfish (*Lophius piscatorius* and *L. budegassa*) from the south-west of Ireland to the south-western Mediterranean
- EE:23 *Robert Aps, H. Lassen, J. Rice, K. Andrejeva, and J. Aps*: Application of Baltic herring and cod stock identification results to fishery management
- EE:24 *Bruno Caneco, Alexandra Silva, and Alexandre Morais*: Morphometric variation among anchovy (*Engraulis encrasicolus*, L) populations from the Bay of Biscay and Iberian waters
- EE:25 *Antonio Celso Fariña, R. Duarte, J. Landa, I. Quincoces, and J.A. Sánchez*: Multiple stock identification approaches of anglerfish (*Lophius piscatorius* and *L. budegassa*) in western and southern European waters
- EE:26 *Deirdre Brophy and Pauline King*: An investigation of stock structure in blue whiting (*Micromesistius poutassou*) using otolith microstructure and core morphometry

- EE:27 *Lotte A.W. Clausen, H. Mosegaard, D. Bekkevold, and D. Ruzzante*: Phenotypic characteristics in genetically different populations in the Skagerrak
- EE:28 *Jákup Reinert and Hóraldur Joensen*: Morphometric analysis of *Sebastes mentella* in the North Atlantic
- EE:29 *Jan Arge Jacobsen and Lars Petter Hansen*: Conventional tagging methods in stock identification: internal and external tags
- EE:30 Poster *Magdalena Podolska and Mirosław Wyszynski*: The population membership of the Baltic herring infected with *Anisakis simplex* larvae.
- EE:31 Poster *Suzanne Ware*: Differences in spawning origins of juvenile whiting *Merlangius merlangus* (L.) inhabiting inshore waters on the west coast of Scotland inferred by otolith microchemistry
- EE:32 *S. Mariani*: Admixture analysis of herring feeding aggregations in the northern North Sea

Modelling Marine Ecosystems and their Exploitation (FF)

- FF:01 *Jose M. Bellido, Nélide Pérez, and Laura Lema*: Optimal Allocation Hauls Sampling in order to Reduce Bias within Fishing Trip in Trawlers Operating in The Grand Sole and Porcupine Areas (NE Atlantic)
- FF:02 *Mark L.Soboil and Jon G. Sutinen*: Empirical Analysis of the Transboundary Dynamics for Georges Bank Groundfish
- FF:03 *Jesús Jurado-Molina and P. A. Livingston*: Perspectives of multispecies management in the eastern Bering Sea.
- FF:04 *Verena M. Trenkel, Marie-Joëlle Rochet, and Tewfik Sari*: A new class of predator prey models for evaluating exploited systems
- FF:05 *Verena M. Trenkel, John K. Pinnegar, and Alex N. Tidd*: Can multispecies models be expected to provide better assessments for Celtic sea groundfish stocks?
- FF:06 *Eckhard Bethke*: A new multi-species model for sustainable exploitation of fish stocks with special regard to cod and flounder fishery in the Baltic Sea
- FF:07 *Jon K. T. Brodziak, Christopher M. Legault, Laurel A. Col, and William J. Overholtz*: Production of demersal and pelagic species biomasses in the northeast USA continental shelf ecosystem
- FF:08 *Tatiana Bulgakova*: A simulation testing of various management regimes for the NEA cod stock
- FF:09 *Peter Bromley and Mike Armstrong*: Spatial interactions between newly settled 0-group cod and their principal predators in the North Sea
- FF:10 *Jan Jaap Poos and A. D. Rijnsdorp*: Spatial segregation between unequal competitors in the Dutch beam trawl fleet
- FF:11 *S. B. M. Kraak, F.C. Buisman, J. J. Poos, M. Dickey-Collas, M. A. Pastoors, J. G. P. Smit, and N. Daan*: How can we manage mixed fisheries? A simulation study of the effect of management choices on the sustainability and economic performance of a mixed fishery.
- FF:12 *Emmanuel Chassot, P. Bernard, T. Rouyer and D. Gascuel*: From biology to economy: application of a static Computable General Equilibrium Model (CGEM) to the fishing industry in Finistère (France)
- FF:13 *J. Begley and D. Howell*: An overview of Gadget, the Globally applicable Area-Disaggregated General Ecosystem Toolbox
- FF:14 *Audrey Colomb, Yunne-Jai Shin, Didier Gascuel, and Jean Le Fur*: Using MOOVES, an individual-based model of the Guinean ecosystem, for assessing the response of trophodynamic and size-based indicators to fishing pressure
- FF:15 *V. Kupca*: A standardized database for fisheries data
- FF:16 Withdrawn

- FF:17 *Morgane Travers, Yunne Shin, Lynne Shannon, Philippe Cury*: Evaluation of ecological indicators for an Ecosystem Approach to Fisheries: application to the southern Benguela upwelling ecosystem
- FF:18 *Joachim P. Gröger, Tu Truong, Brian J. Rothschild, and F. Azadevar*: A New Approach Towards an Optimal Control of Fisheries on Georges Bank: the SMAST Groundfish Optimization Simulation Model
- FF:19 *Peter J. Bromley*: The use of ecosystem indices to investigate the decline of recruitment and spawning stock biomass in North Sea cod (*Gadus morhua* L.)
- FF:20 *Peter Lewy and Morten Vinther*: Modelling stochastic age-length-structured multispecies stock dynamics
- FF:21 *Geir Huse*: The impact of movement rules on predator-prey encounters in multispecies models
- FF:22 *Daniel Howell*: Comparison of the effects of forced errors in survey data between an age and an age-and-length structured model of Northeast Arctic Cod
- FF:23 *L. Taylor, J. Begley, V. Kupca, and G. Stefansson*: A Simple Implementation of Gadget for Cod in Icelandic Waters
- FF:24 *Höskuldur Björnsson and Einar Jónsson*: Estimation of hidden mortality of Icelandic haddock caused by the fisheries
- FF:25 *Kjartan G. Magnússon, Sven Th. Sigurdsson, and Petro Babak*: Estimation of fish movement parameters from tagging data, with application to Atlantic cod (*Gadus morhua*)
- FF:26 *G. Stefansson and L. Taylor*: Verifying consistency when fitting complex statistical models to multiple data sets with applications to fish population dynamics and fisheries
- FF:27 *Paul Marchal, Bo Andersen, David Bromley, Ane Iriondo, Stéphanie Mahévas, Floor Quirijns, Brian Rackham, Marina Santurtun, and Nicola Tien*: Linking fishing effort and fishing mortality in a mixed-fisheries context
- FF:28 *Sophie Bertrand, Francois Gerlotto, Julian M. Burgos, and Erich Diaz*: Fish and fishers predator-prey relationships: fishing vessel trajectories to assess the dynamics of pelagic fish spatial distribution
- FF:29 *Lorna Taylor and G. Stefansson*: Gadget models of cod-capelin-shrimp interactions in Icelandic waters
- FF:30 *S. Hannesson, A. Jakobsdottir, J. Begley, L.A. Taylor and G. Stefansson*: On the use of tagging data in statistical multi-area models of marine populations
- FF:31 *Martin Dorn*: Extending separable age-structured assessment models to evaluate trends in juvenile mortality of walleye modeling in the Gulf of Alaska
- FF:32 *John Pope, Jake Rice, Simon Jennings, Niels Daan, and Henrik Gislason*: Are the slopes of size spectra a useful tool for measuring the impact of fisheries in multispecies systems?
- FF:33 *Ulf Lindstrøm*: Simulation of minke whale suitabilities with special emphasis on herring, capelin and krill
- FF:34 *Kjartan G. Magnússon, Sven Th. Sigurdsson, and Eva Hlín Dereksdóttir*: A simulation model for capelin migrations in the North-Atlantic
- FF:35 Poster *Jesus M. Torres Palenzuela and Juan M. Corchado*: Forecasting system for fishing effort in Galician craft fleet (Spain)
- FF:36 *Jason Matthiopoulos, Christian Asseburg, Sophie Smout, and John Harwood*: Fitting functional responses to field data: evaluating the multispecies functional responses of grey seals and harp seals
- FF:37 Poster *Claudio E Gatica Molina and Jesús Jurado-Molina*: Incorporating cannibalism in the stock assessment of hake in central Chile
- FF:38 Poster *John K. Pinnegar, Nicholas V.C. Polunin, and Peter J.W. Olive*: Stable Isotopes: from a theoretical model to a useful ecological tool for exploring food-webs.
- FF:39 Poster *Julia L. Blanchard, Nick K. Dulvy, Jim E. Ellis, Simon Jennings, John K. Pinnegar, Alex Tidd, and Laurence T. Kell*: Fishing and environmental effects on size-based indicators of Celtic Sea fish community structure?
- FF:40 Poster *G. M. Daskalov and S. Mackinson*: Trophic modeling of the North Sea

- FF:41 Poster *G. M. Daskalov*: Efficiency of trophic interactions as an indicator of food web structure
- FF:42 Poster *Maciej Tomasz Tomczak*: Preliminary model of the Puck Lagoon ecosystem: an investigation using Ecopath