

1994 ANNUAL SCIENCE CONFERENCE

CONTRIBUTIONS, AGENDAS AND TIMETABLES

| Contribu | <u>itions</u> | <u>Page</u> |
|----------|---|-------------|
| Gen | General Assembly Reports and Papers of General Interest | 1 |
| Del | Delegates Meetings | 2 |
| Fi | Finance Committee | 3 |
| Pub | Publications Committee | 3 |
| Ά | Consultative Committee | 4 |
| В | Fish Capture Committee | 5 |
| C | Hydrography Committee | 8 |
| D | Statistics Committee | 9 |
| E | Marine Environmental Quality Committee | 10 |
| F | Mariculture Committee | 12 |
| G | Demersal Fish Committee | 14 |
| Н | Pelagic Fish Committee | 17 |
| J | Baltic Fish Committee | 19 |
| K | Shellfish Committee | 21 |
| L | Biological Oceanography Committee | 24 |
| M | Anadramous and Catadromous Fish Committee | 26 |
| N | Marine Mammals Committee | 28 |
| Mini | Mini-Symposium on Fish Migration | 29 |
| 0 | Theme Session on Non-Target Species | . 31 |

| P · | Theme Session on Multispecies Interactions of Importance to the Groundfish Abundance Fluctuations | 32 |
|----------------|--|----------|
| Q | Theme Session on Impact of the 1993 Major Inflow to the Baltic Sea | 33 |
| R | Theme Session on Pelagic Fish and Plankton Interactions in Marine Ecosystems | 34 |
| S | Theme Session on Large-Scale Circulation Changes in the North Atlantic on Time Scales of Climatic Changes | 35 |
| T | Theme Session on Improving the Link between Fisheries and Management: Biological, Social and Economic Considerations | 36 |
| C+E+L | Joint Session on Quality Assurance of Marine Measurements | 39 |
| E+N | Joint Session on Occurrence and Effects of Contaminants in Marine Mammals | 40 |
| B+D+ G+H | Joint Session on Estimating Abundance from Fishing Surveys and Acoustic Measurements | 41 |
| ACFM | Advisory Committee on Fishery Management Assessment Working Group Reports | 42 |
| ACME | Advisory Committee on the Marine Environment Environment-Related Working Group Reports | 43 |
| Assess/ Env | Working Group Report Related to Joint Meeting ACFM/ACME | 44 |
| Agenda a | and Orders of the Day | |
| Fish Cap | ture Committee Agenda | 45 46 |
| Hydrogra | aphy Committee | |
| | Agenda | |
| Statistics | Committee Agenda | |
| Marine E | Environmental Quality Committee Agenda | |
| Maricult | are Committee Agenda Orders of the Day | |

| Demersal Fish Committee | |
|--|--------------|
| Agenda | . 68 . 69 |
| Pelagic Fish Committee | - . |
| Agenda | . 75 |
| Baltic Fish Committee | |
| Agenda | |
| Shellfish Committee | |
| Agenda | |
| Biological Oceanography Committee | |
| Agenda | |
| Andramous and Catadromous Fish Committee | |
| Agenda | |
| Marine Mammals Committee | |
| Agenda | |
| Mini-Symposium on Fish Migration Orders of the Day | . 99 |
| Theme Session on Non-Target Species | |
| Order of the Day | 102 |
| Theme Session on Multispecies Interactions of Importance to the Groundfish Abundance | |
| Fluctuations Orders of the Day | 103 |
| Theme Session on Impact of the 1993 Major Inflow to the Baltic Sea | |
| Order of the Day | 105 |
| Theme Session on Pelagic Fish and Plankton Interactions in Marine Ecosystems Order of the Day | 106 |
| | |
| Theme Session on Large-Scale Circulation Changes in the North Atlantic on Time Scales of Climatic Changes Order of the Day | 107 |
| | 107 |
| Theme Session on Improving the Link between Fisheries Science and Management: Biological, Social and Economic Considerations | 100 |
| Orders of the Day | 108 |
| Joint Session on Quality Assurance of Marine Measurements Order of the Day | 113 |

| | e and Effects of Contaminants in Ma | arine Mammals | 114 |
|---|-------------------------------------|--------------------------|-----|
| _ | Abundance from Fishing Surveys a | nd Acoustic Measurements | 115 |

GENERAL ASSEMBLY REPORTS AND PAPERS OF GENERAL INTEREST

Gen:1 Observers' reports from cooperating organizations

Gen:2 ICES activities in 1993/1994

Gen:3 Election of standing scientific committee Chairmen at 1994 Annual Science Conference

(82nd Statutory Meeting) (E+F)

Gen:4 Report of the Mid-Term Meeting of the Consultative Committee, ICES Headquarters,

Ref. A + Del 1-2 June 1994

Gen:5 Advance Release of Tables, 1-6 of ICES Fisheries Statistics, Vol. 78, 1993

Gen:6 1993/1994 overview of ICES Committees and subsidiary Groups and their "shadowing"

by Secretariat staff, and schedule of ICES Meetings and assigning of document codes

⁽E + F) = in English and French

DEL - DELEGATES DOCUMENTS

| Del:1* | Audited Income and expenditure Account for the Financial Year 1992/1993 with Balance Sheet at 31/10 1993 |
|---------|--|
| Del:2* | Progress report on Administration for the year 1 November 1993 to 31 October 1994 |
| Del:3* | Report on Activities, 1993 |
| Del:4* | Estimated accounts for the financial year 1993/1994 |
| Del:5* | Draft budget for financial year 1994/1995 (E+F) |
| Del:6* | Draft forecast budget for the financial year 1995/1996 (E+F) |
| Del:7* | Elections and appointments by the Council at the 82^{nd} Statutory Meeting (E+F) |
| Del:8* | Proposal for an ICES policy on marine mammals |
| Del:9* | Auditing of the Council's accounts and the relationship with the Auditor General of Denmark |
| Del:10* | Status, rules and procedures governing data bases maintained at the ICES Secretariat |
| Del:11* | Cooperation with other international organizations: working relationships and financial arrangements |
| Del:12* | ICES role in promoting, participating in, and coordinating major international scientific programmes |
| Del:13* | Conclusion of North Sea Task Force and succeeding developments |
| Del:14* | Topics for Delegates "Extra" Meeting |

^{*} For Delegates only (E+F) in English and French

FI - FINANCE COMMITTEE

FI:1* Agenda for the Finance Committee

PUB - PUBLICATIONS COMMITTEE

| Pub:1 | Agenda for the Publications Committee |
|-------|--|
| Pub:2 | Publication activities in 1993/1994 |
| Pub:3 | Sale of ICES publications during the last three years |
| Pub:4 | Report of the Editors of the ICES Journal of Marine Science for 1993/1994 |
| Pub:5 | Academic Press publisher's report for 1994: ICES Journal of Marine Science |
| Pub:6 | Financial Status of ICES Journal of Marine Science for 1993 |
| Pub:7 | ICES Cooperative Research Report series: Editor's Report 1993/1994 |
| Pub:8 | Publication of ICES Symposium proceedings: future developments with Academic Press |

REFERENCE PAPERS: E:2, L:33

A - CONSULTATIVE COMMITTEE

| A:1* | Agenda for the Consultative Committee |
|------------------------|---|
| A:2* | Minutes of ACFM Meeting, ICES Headquarters, 26 October-3 November 1993 |
| A:3* | Minutes of ACFM Meeting, ICES Headquarters, 17-25 May 1994 |
| A:4* | Minutes of ACME Meeting, ICES Headquarters, 25-31 May 1994 |
| A:5* | Report of Joint Meeting of ACFM and ACME, 24 May 1994, Charlottenlund Denmark |
| A:6* Ref. ACFM/ACME | Planning Group for the Tenth Dialogue Meeting on "Fisheries and Marine Environmental Problems in the Bay of Biscay and Iberian Region", 22-23 March 1994, Vigo, Spain |
| A:7 Ref. C,G,H,J+L | Report of the Working Group on Cod and Climate Change |
| A:8 Ref. E,N | Report of the Study Group on Long-Finned Pilot Whales |
| A:9 Ref. C,G,H,J+L | Report of ICES/GLOBEC Cod and Climate Data Base Workshop |
| A:10 Ref. C,G,H,J+L | Report of ICES/GLOBEC Cod and Climate "Aggregation Workshop", Charlottenlund, 22-24 August 1994 |
| A:11 Ref. ACFM/ACME | Report of the Ad Hoc ICES-British Marine Fishes Database (BMFD) Group |
| A:12 | Report of ICES/GLOBEC Cod and Climate Backward-Facing Workshop |
| A:13 | Compendium of Draft Recommendations |
| | |

B - FISH CAPTURE COMMITTEE

| B:1 | | Report of Activities 1993 |
|--|--|---|
| B:2 | | Report of the Working Group on Fishing Technology and Fish Behaviour |
| B:3 Ref.H | | Report of the Working Group on Fisheries Acoustics Science and Technology |
| B:4 | | Report of the Joint Session of the WG on Fishing Technology and Fish Behaviour and WG on Fisheries Acoustics Science and Technology |
| B:5 | | Report of the Study Group on Research Vessel Noise Measurement |
| B:6 | | Report of the Study Group on Target Strength Methodology |
| B:7 | | Report of the Sub-Group on Selectivity Methods |
| B:8 | | Report of the Sub-Group on Methodology of Fish Survival Experiments |
| B:9 | | Report of the Workshop on Hydroacoustic Instrumentation |
| B:10 Ref. G | D.A. Wileman and J. Main | Attempts to develop a species selective trawl for fishing pout |
| B:11 | | Withdrawn |
| | | |
| B:12 Ref. K | J. Boje and K.M. Lehmann | Selectivity in shrimp trawl codend from an alternate haul experiment |
| | | • |
| Ref. K | K.M. Lehmann | ment Intermediate results in EC-project TE-3-613 "Improved species |
| Ref. K B:13 B:14 | K.M. LehmannB. van Marlen <i>et al</i>.N. Madsen and | ment Intermediate results in EC-project TE-3-613 "Improved species and size selectivity of mid-water trawls (SELMITRA)" Measurement of the selectivity of <i>Nephrops</i> and demersal round-fish species in conventional and square mesh panel codends in |
| Ref. K B:13 B:14 Ref. G, K | K.M. LehmannB. van Marlen <i>et al</i>.N. Madsen andT. Moth-Poulsen | Intermediate results in EC-project TE-3-613 "Improved species and size selectivity of mid-water trawls (SELMITRA)" Measurement of the selectivity of <i>Nephrops</i> and demersal roundfish species in conventional and square mesh panel codends in the northern North Sea Comparative fishing with FRVs "Walther Herwig" and "Walther |
| Ref. K B:13 B:14 Ref. G, K B:15 B:16 | K.M. LehmannB. van Marlen et al.N. Madsen andT. Moth-PoulsenS. Ehrich et al. | Intermediate results in EC-project TE-3-613 "Improved species and size selectivity of mid-water trawls (SELMITRA)" Measurement of the selectivity of <i>Nephrops</i> and demersal roundfish species in conventional and square mesh panel codends in the northern North Sea Comparative fishing with FRVs "Walther Herwig" and "Walther Herwig III" Scale damage and survival of haddock escaping through codend |
| Ref. K B:13 B:14 Ref. G, K B:15 B:16 Ref. G B:17 | K.M. Lehmann B. van Marlen et al. N. Madsen and T. Moth-Poulsen S. Ehrich et al. E. Jónsson J. Hamre and | Intermediate results in EC-project TE-3-613 "Improved species and size selectivity of mid-water trawls (SELMITRA)" Measurement of the selectivity of Nephrops and demersal roundfish species in conventional and square mesh panel codends in the northern North Sea Comparative fishing with FRVs "Walther Herwig" and "Walther Herwig III" Scale damage and survival of haddock escaping through codend meshes (tank experiment) Test experiments of target strength of herring by comparing density indicies obtained by acoustic method and purse seine |
| Ref. K B:13 B:14 Ref. G, K B:15 B:16 Ref. G B:17 Ref. D, H | K.M. Lehmann B. van Marlen et al. N. Madsen and T. Moth-Poulsen S. Ehrich et al. E. Jónsson J. Hamre and A. Dommasnes | Intermediate results in EC-project TE-3-613 "Improved species and size selectivity of mid-water trawls (SELMITRA)" Measurement of the selectivity of Nephrops and demersal roundfish species in conventional and square mesh panel codends in the northern North Sea Comparative fishing with FRVs "Walther Herwig" and "Walther Herwig III" Scale damage and survival of haddock escaping through codend meshes (tank experiment) Test experiments of target strength of herring by comparing density indicies obtained by acoustic method and purse seine catches |

B - FISH CAPTURE COMMITTEE

| B:21 | B.R. McCallum | Calibration of hydroacoustic instrumentation for survey trawl mensuration |
|-------------------|----------------------------------|---|
| B:22 Ref. G | T. Moth-Poulsen | Development of a species selective whiting trawl |
| B:23 Ref. G | M. Meillat et al. | Preliminary results of a trawl fitted with a selective grid for the fishery of benthic species from the Celtic Sea and the Bay of Biscay |
| B:24 Ref. D | F. Theret | A mathematical model for the determination of the shape and the tensions of a trawl placed in a uniform current |
| B:25 Ref. D | G. Bavouzet and Y. Cadion | Meschal data acquisition software for sea trials |
| B:26 Ref. D | F. Gerlotto et al. | Exhaustive observation of 3-D school structure using multibeam side scan sonar: potential use for school classification, biomass estimation and behaviour studies |
| B:27 | H. Nes | Split beam dual target detection properties |
| B:28 Ref. G, H | O.A. Misund and A. Beltestad | Size-Selection of mackerel and saithe in purse seine |
| B:29 Ref. G | N. Lowry et al. | Mesh size experiments in the Baltic cod fishery |
| B:30 Ref. G | E. Ona | Detailed in situ target strength measurements of Cod 0-Group |
| B:31 | F.G. O'Neill and L. Xu | Twine flexural rigidity and mesh resistance to opening |
| B:32 Ref. G, K | J.H.B. Robertson and A.M. Shanks | The effect on catches of <i>Nephrops</i> , haddock and whiting of square mesh window position in a Nephrops trawl |
| B:33 | | Withdrawn |
| B:34 | N. Lowry and J.H.B. Robertson | The effect of twine thickness on cod-end selectivity of trawls for haddock in the North Sea |
| B:35 | R.S.T. Ferro and F.G. O'Neill | An overview of the characteristics of twines and netting that may change cod-end selectivity |
| B:36 | R.S.T. Ferro and F.G. O'Neill | An overview of methods of measuring twine and netting characteristics and mesh size |
| B:37 | R.S.T. Ferro and L. Xu | Comparisons of mesh size measurements with the ICES and wedge gauges |
| B:38 | K. Lehmann and G.I. Sangster | Commercial fishing experiments to assess the scale damage and survival of haddock and whiting after escape from four sizes of diamond mesh codends |
| B:39 Ref. K | H. Polet and F. Redant | Selectivity experiments in the Belgian Norway lobster (Nephrops norvegicus) fishery |

B - FISH CAPTURE COMMITTEE

40

K.G. Foote

Coincidence echo statistics

Ref. D, L

REFERENCE PAPERS: D:4, D:18, D:19, G:14, G:23, G:27, G:34, J:13, N:5

C - HYDROGRAPHY COMMITTEE

| C:1 Ref.L | | Report of the Working Group on Shelf Seas Oceanography |
|--------------|-------------------------------|---|
| C:2 | | Report of the Working Group on Marine Data Management |
| C:3 | | Report of the Working Group on Oceanic Hydrography |
| C:4 | | Withdrawn |
| C:5 Ref.L | | Workshop on Modelling the Population Dynamics of Harmful Algal Blooms |
| C:6 | S. Jónsson and K. Guðmundsson | An interdisciplinary study of Eyjafjörður, North Iceland |
| C:7 | C.M. Afonso Dias | Circulation and water masses off the Portuguese coast in September-October 1991 |
| C:8 | M. Bersch and J. Meincke | Meridional transport estimates for the northern North Atlantic |

REFERENCE PAPERS: A:7, A:9, A:10, ENV:1, ENV:10, E:5, E:18, H:23, K:20 (poster), L:3, L:27

D - STATISTICS COMMITTEE

| D:1 Ref.G,H+J | | Report of the Workshop on Sampling Strategies for Age and Maturity, 3-9 February 1994, ICES Headquarters |
|----------------------|-----------------------------|---|
| D:2 | ICES Fishery Secretary | Progress Report 1993/1994 |
| D:3 | J.P. Hillis | Density dependent growth and natural mortality in exploited fish populations; important parameters in fishery conservation calculations |
| D:4 Ref B, G | J.P. Hillis | Use of swept area surveys to calculate fishing mortality (F) in commercial fish stocks; the need for survey gear development |
| D:5 | W.L. Gabriel | Simple method for estimating uncertainty associated with $\boldsymbol{F}_{\text{med}}$ |
| D:6 Ref. G | R.A. Myers and N.G. Cadigan | The statistical analysis of catch-at-age data with correlated errors |
| D:7 Ref. G | G.T. Evans | Disentangling the inferences of sequential population analysis can reveal underlying problems |
| D:8 | W.G. Warren | Removal estimates of atlantic salmon parr: maximum likelihood and Bayesian methods |
| D:9 | W.G. Warren | The effect of fish movement on trawl survey estimates of abundance: The Northern Cod |
| D:10 Ref. G, H, J | J.M. Hoenig et al. | A computationally simple approach to using current and past data in an age-length key |
| D:11 Ref. G, H, I | J.M. Hoenig et al. | Testing the equivalence of two age determination methods (or two age readers) |
| D:12 | | Withdrawn |
| D:13 Ref. G | W.G. Warren et al. | Estimating the population mean stomach content weight of cod from a stratified random trawl survey and length stratified stom- ach sampling |
| D:14 Ref. G, H, 3 | P. Petitgas | Spatial strategies of fish populations |
| D:15 | | Withdrawn |
| D:16 | | Withdrawn |
| D:17 | | Withdrawn |
| D:18 Ref. B | A.M. Shanks et al. | The use of catch and effort data in the assessment of Nephrops fisheries |
| D:19 Ref. B, G | S.A. Reeves | Seasonal and annual variation in catchability of sandeels at Shetland |
| D:20 | K. Thorarinsson et al. | The potential effects of variations in proportions mature at age on estimated stock numbers of Icelandic cod |

REFERENCE PAPERS: B:17, B:24, B:25, B:26, B:40, E:14, F:19, G:7, G:9, G:16, G:24, H:11, H:13, H:20, J:14, K:11, K:25, L:22, N:5 (poster), Env:6, Env:8

E - MARINE ENVIRONMENTAL QUALITY COMMITTEE

| E:1 | | Report of Activities, 1993 |
|---|--|--|
| E:2 Ref.Pub | | Report of the Editor of the Techniques in Marine Environmental Sciences for 1994 |
| E:3 | | Report of the Working Group on the Baltic Marine Environment |
| E:4 | | Report of the Working Group on the Effects of Extraction of Marine Sediments on Fisheries |
| E:5 Ref. C | | Report of the Study Group on Environmental Modelling of the Baltic Sea |
| E:6 | | Report of the Steering Group for the Coordination of a Baseline Study on Contaminants in Baltic Sediments |
| E:7 | | Report of the Steering Group on Quality Assurance of Biological Measurements in the Baltic Sea |
| E:8 | | Report of the Steering Group on Quality Assurance of Chemical Measurements in the Baltic Sea |
| E:9 Ref. L | | ICES/HELCOM Workshop on Quality Assurance of Pelagic Measurements in the Baltic Sea |
| E:10 Ref. L | | ICES/HELCOM Workshop on Quality Assurance of Benthic Measurements |
| E:11 | | Report of the ICES/HELCOM Workshop on Quality Assurance of Chemical Analytical Procedures for the Baltic Monitoring Programme |
| E:12 Ref. F, G | B. Watermann and N. Peters & Schmidt | Occurrence and structure of cysts in x-cell lesions of Atlantic cod (Gadus morhua L.) |
| | | |
| E:13 | | Withdrawn |
| E:13 E:14 Ref. D | K.H. van Bernem and A. Müller | Withdrawn Distribution of habitats and pollutants on tidal flats in the entire German Wadden Sea |
| E:14 | | Distribution of habitats and pollutants on tidal flats in the entire |
| E:14 Ref. D E:15 | and A. Müller | Distribution of habitats and pollutants on tidal flats in the entire German Wadden Sea Dumped radioactive material in the Kara Sea. Report from three |
| E:14 Ref. D E:15 Poster E:16 | and A. Müller L. Føyn | Distribution of habitats and pollutants on tidal flats in the entire German Wadden Sea Dumped radioactive material in the Kara Sea. Report from three joint Norwegian/Russian expeditions Radioactive contamination in the Barents Sea, past and present |
| E:14 Ref. D E:15 Poster E:16 Ref. G, H E:17 Ref. K | and A. Müller L. Føyn L. Føyn | Distribution of habitats and pollutants on tidal flats in the entire German Wadden Sea Dumped radioactive material in the Kara Sea. Report from three joint Norwegian/Russian expeditions Radioactive contamination in the Barents Sea, past and present status, uptake of radionuclides in fish and its impact on fisheries Heavy metals and other elements in the hydrolysate of shellfish |
| E:14 Ref. D E:15 Poster E:16 Ref. G, H E:17 Ref. K Poster E:18 | and A. Müller L. Føyn L. Føyn T. Alkanani <i>et al</i> . | Distribution of habitats and pollutants on tidal flats in the entire German Wadden Sea Dumped radioactive material in the Kara Sea. Report from three joint Norwegian/Russian expeditions Radioactive contamination in the Barents Sea, past and present status, uptake of radionuclides in fish and its impact on fisheries Heavy metals and other elements in the hydrolysate of shellfish species from Northeast Brazil Changes in the German Bight pelagic environment during three |

E - MARINE ENVIRONMENTAL QUALITY COMMITTEE

E:21 Poster P. Roose et al.

PCB's in cod, flounder and mussel from the Belgian continental shelf in the period 1983-1992: trend analysis and tissue distribution.

REFERENCE PAPERS: A:8, F:3, F:5, F:7, F:10, L:6, L:27, N:2, Env:1, Env:2, Env:3, Env:4, Env:5, Env:6, Env:8, Env:9, Env:10

F - MARICULTURE COMMITTEE

| F:1 | | Report of Activities, 1993 |
|-------------------------------------|----------------------------------|---|
| | | |
| F:2 | | Publications of Interest to the Mariculture Committee, 1993 |
| F:3 Ref.E | | Report of the Working Group on Environmental Interactions of Mariculture |
| F:4 | | Report of the Working Group on the Application of Genetics in Fisheries and Mariculture |
| F:5 Ref. E | | Report of the Working Group on Pathology and Diseases of Marine Organisms |
| F:6 | | Report of the Working Group on Mass Rearing of Juvenile Marine Fish |
| F:7 Ref. E | | Report of the Sub-Group on Statistical Analysis of Fish Disease Data |
| F:8 | C.M. Morrison and C.A. MacDonald | Description of the trophozoites and spores and discussion of taxonomy of myxosporean parasites in the gallbladder of the Atlantic halibut, <i>Hippoglossus hippoglossus</i> . |
| F:9 Ref. G, K | | Workshop to Evaluate the Potential of Stock Enhancement, Charlottenlund |
| F:10 Ref.E | H. Ackefors and K. Grip | Swedish coastal zone management - a system for integration of various activities |
| F:11 Ref. G Poster | D. Wiseman and J.A. Brown | Effects of prey density and temperature on early growth and survival of common wolffish larvae |
| F:12 Ref. G Poster (c) | F. Shahidi and E. Dunajski | Mariculture of farmed cod (Gadus morhua) |
| F:13 | D. Minchin and D. Jackson | Monitoring of sea-lice infestations of farmed salmonids in Ireland 1991-1994 |
| F:14 | D. Jackson et al. | Observations on the larval stages of the salmon louse, Lepeophtheirus salmonis |
| F:15 Ref. K Poster | A. Littaye-Mariette | Monitoring the growth of <i>Crassostrea gigas</i> in French oyster farming areas, protocol and results of 1993 |
| F:16 Ref. G Poster (c) | A.K. Imsland et al. | Studies on haemoglobin genotypes in Turbot and their relation with growth |
| F:17 Ref. M | R.S. Raynard et al. | Development of a vaccine for the control of sea lice (Lepeophtheirus salmonis and Caligus elongatus) in Atlantic Salmon (Salmo salar) |
| F:18 Poster | T. Mäkinen et al. | Feed wastage and feeding behaviour of rainbow trout in net cages with pendulum feeders |

F - MARICULTURE COMMITTEE

| F:19 Ref. D | S. Des Clers | Sampling to detect infections and estimate prevalence in aquaculture |
|-------------------|---------------------------|--|
| F:20 Poster | I.B. Falk-Petersen et al. | Fertilization, egg-incubation and development of the spotted wolffish, <i>Anarhichas minor</i> , a new species in aquaculture |
| F:21 | K. Boxaspen | Comparison of the effect of dichlorvos and pyrethrins against salmon lice (<i>Lepeophtheirus salmonis</i>) parasitic on salmon (<i>Salmo salar</i>) by one or successive treatments. |
| F:22 | R.A. Khan | Parasites as potential pathogens in Atlantic cod mariculture |
| F:23 | M. Hill et al. | Coastal resource inventory and mapping in Nova Scotia: Community involvement in mariculture planning and development |
| F:24 | | Withdrawn |
| F:25 Poster | D. Kieser | Decision-pathways used to adjudicate the introduction and transfers of live aquatic organisms into and within British Colombia |
| F:26 | A. Ervik and P.K. Hansen | Case histories and new approaches to planning and modelling for Norwegian mariculture |
| F:27 | T.E. Chua | Review of the coastal zone profile research work within Asean countries with special emphasis on mariculture |
| F:28 | P. Burbridge | Planing process in coastal zone management |
| F:29 | | Withdrawn |
| F:30 | S.M. Bower et al. | Potential for the Pacific oyster, Crassostrea gigas to serve as a reservoir host and carrier of oyster pathogens |
| F:31 | O. Matsuda | Mariculture and coastal zone management in Japan: the case of the Seto Inland Sea |
| F:32 Ref. Pub. | G. Olivier | ICES Identification Leaflets for Diseases and Parasites of Fish and Shellfish. Editors Report 1993/1994. |

REFERENCE PAPERS: E:12, G:41, J:20, M:3, M:16, M:27, Env:7, Env:9

G - DEMERSAL FISH COMMITTEE

| G:1 | | Report of Activities, 1993 |
|------------------|-------------------------------------|--|
| G:2 | | Withdrawn |
| G:3 Ref.H | | Preliminary report of the International 0-Group Fish Survey in the Barents Sea and Adjacent waters in August-September 1993 |
| G:4 | | Report of the Study Group on Redfish Stocks |
| G:5 | | Report of the Study Group on Beam Trawl Surveys |
| G:6 Ref. H | | Report of the Study Group on the Coordination of Bottom Trawl Surveys in Sub-areas VI, VII, and VIII and Division IXa |
| G:7 Ref. D | A.M. Ajiad et al. | Can a bioenergetics model explain growth of the Northeast Arctic Cod? |
| G:8 | | Withdrawn |
| G:9 Ref. D, L | A.D. Rijnsdorp and P.I. van Leeuwen | Changes in growth of North Sea plaice since 1950 and its relation to density, eutrophication, beam trawl effort and temperature |
| G:10 | P.I. van Leeuwen et al. | Variations in abundance and distribution of demersal fish species in the coastal zone of the southeastern North Sea between 1980 and 1993 |
| G:11 | P. Gerrior et al. | How 'mixed' is the mixed species trawl fishery on Georges Bank? or evaluating fishery performance via an observer pro- gram |
| G:12 | | Withdrawn |
| G:13 | T. Neudecker and U. Damm | Abundance indices of young plaice (<i>Pleuronectes platessa</i> L.) and sole (<i>Solea solea</i> L.) at the West Coast of Schleswig-Holstein North Sea |
| G:14 Ref. B | O.R. Godø | Natural fish behaviour and catchability of groundfish |
| G:15 | | Withdrawn |
| G:16 Ref. D | S. Tjelmeland and J. Alvarez | Estimating initial stomach content using stochastic simulation |
| G:17 | | Withdrawn |
| G:18 | F. Cardador and A M Caramelo | Distribution pattern of hake (Merluccius merluccius) in the Portuguese waters (ICES, Div.IXA) based on groundfish surveys data |
| G:19 | M. Azevedo | Contribution to the study of the biology of monkfish stocks in ICES Divisions VIIIc and IXa |
| G:20 | M. Azevedo | An attempt to estimate fishing effort in a mixed fishery: application to the Portuguese monkfish and megrims commercial landings |

G - DEMERSAL FISH COMMITTEE

| G:21 | A. Silva and M. Azevedo | Abundance and distribution of megrims, Lepidorhombus boscii and L. whiffia gonis in ICES Division IXa (Portuguese waters) |
|----------------|-------------------------------------|--|
| G:22 | M. Azevedo and P. Pereda | Comparing monkfish (Lophius piscatorius and L. budegassa) abundance in ICES Division VIIIc by year and depth strata |
| G:23 Ref. B | H. M. Dinis | An experiment on diel variation in trawl catches of hake |
| G:24 Ref. D | D. Nowicki et al. | Etude de la répartition de poissons demersaux par campagne de chalutage |
| G:25 | K. Gorchinsky et al. | Northern Mid-Atlantic Ridge (42°-50°N) icthyofauna characteristics. Some results from the Russian-Norwegian Deep-Water Expedition in September-October 1993 |
| G:26 | R. Duarte et al. | Study on the growth of black monkfish (<i>Lophius budegassa</i> , Spinola) and white anglerfish (<i>L. piscatorius</i> , L.) of ICES Stock in Division VIIIc + IXa |
| G:27 Ref. B | A. Aglen and O. Nakken | Length dependent corrections of survey estimates of cod and haddock in the Barents Sea |
| G:28 | M.M. Martins et al. | Evolution of the Portuguese fishery of black scabbard fish (Aphanopus carbo Lowe, 1839) during the period 1984–1993 |
| G:29 Ref. K | F. Redant and H. Polet | Introduction on the finfish by-catches and discards in the Belgian Norway lobster (<i>Nephrops norvegicus</i>) fishery |
| G:30 | I.Ya. Ponomarenko and N.A. Yaragina | Maturity rate of the Lofoten-Barents Sea cod in 40s and 90s |
| G:31 | O.V. Smirnov et al. | Results of Russian investigations for Greenland halibut from the Norwegian Barents sea stock in 1993 |
| G:32 | V.K. Ozhigin et al. | Dependence of the Barents Sea cod growth upon conditions of their feeding on capelin and water temperature |
| G:33 Ref. L | V. Shibanov and S.P. Melnikov | Status of the commercial stock of redfish (Sebastes mentella Travin, Oceanic type) in the Irminger Sea in 1993 as evaluated by Russian Ichthyoplankton Survey |
| G:34 Ref. B | V.M. Shibanov <i>et al</i> . | Results of the Russian Trawl Acoustic Survey for Sebastes mentella of the Irminger Sea in 1993 |
| G:35 | P.J. Bromley and T. Watson | The effect of sea bed type on the distribution of cod, haddock and whiting in the North Sea off the north east coast of England |
| G:36 Poster | D. Bucke et al. | Pathological investigations into pigment anomalies and blindness in angler fish (<i>Lophius piscatorius</i> and <i>L. budegassa</i>) from the Celtic Deeps |

G - DEMERSAL FISH COMMITTEE

| G:37 Ref. H | R.A. Myers and N.J. Barrowman | Is fish recruitment related to spawner abundance? |
|----------------|-------------------------------|---|
| G:38 | J.E. Eliassen et al. | Coastal and fjord resources off Finnmark and Troms Counties, Norway, based on the 1992 survey |
| G:39 | P. Solemdal et al. | The spawning of Arcto-Norwegian cod in Lofoten during March-April 1994, influenced by temperature and tradition. |
| G:40 | Yu. M. Lepesevich et al. | Russian investigations on cod and haddock in the Barents Sea and adjacent waters in November 1993 - January 1994 |
| G:41 Ref. F | C. Hammer and G. Schwarz | The effect of endurance swimming on growth, body composition and calorific content of 0-group whiting (Merlangius merlangus, Gadidae) |
| G:42 Ref. H | A.P. Robb et al. | Analysis of the whiting stomachs collected in the North Sea during the 1991 ICES Stomach Sampling Project |
| G:43 | F.A. van Beek | The "one and only" management objective of fishery biologists |
| G:44 | J. Magnússon et al. | Report on the Joint Icelandic Norwegian Survey on Oceanic Redfish in the Irminger Sea and Adjacent Waters, in June/July 1994 |
| G:45 | | Report on the 0-Group Fish Survey in Iceland & East Greenland Waters, August - September 1994 |

REFERENCE PAPERS: A:7, A:9, A:10, B:10, B:14, B:16, B:22, B:23, B:28, B:29, B:30, B:32, D:1, D:4, D:6, D:7, D;10, D:11, D:13, D:14, D:19, E:12, E:16, F:9, F:11, F:12 (poster), F:16 (poster), H:6, J:14, J:19 (poster), J:20, J:24, K:25, K:34, L:14, L:16, L:25, L:26, L:27, M:5, N:12, N:14

H - PELAGIC FISH COMMITTEE

| | | 0.4 11 1000 |
|-------------------|--------------------------------|---|
| H:1 | | Report of Activities 1993 |
| H:2 | | Publications of Interest to the Pelagic Fish Committee, 1993 |
| H:3 Ref.J | | Report of the Planning Group for Herring Surveys |
| H:4 | | Report of the Mackerel/Horse Mackerel Egg Production Workshop |
| H:5 | | Report of the Study Group on Herring Assessment and Biology in the Irish Sea and Adjacent Waters |
| H:6 Ref. G | | Report of the International Bottom Trawl Survey Working Group |
| H:7 Ref. J | | Report of the Workshop on Herring Age Reading |
| H:8 | A. Eltink | Equilibrium Catch and Stock Predictions in weight and value for southern horse mackerel |
| H:9 | | Withdrawn |
| H:10 | R. Stephenson et al. | Understanding the dynamics of herring: lessons from larvae |
| H:11 Ref. D | A. Dommasnes and K. Hiis Hauge | Hermod, a single species model of the Norwegian spring spawning herring stock |
| H:12 | T. Monstad and S.V. Beilikov | Investigations on blue whiting in the area west of the British Isles, spring 1994. |
| H:13 Ref. D, J | E. Torstensen | Results of the Workshop on Comparative Age Reading on Sprat from ICES Div. IIIa |
| H:14 | | Withdrawn |
| H:15 Ref. J | H. Lassen and E. Rasmussen | Identifying Rügen herring in Skagerrak using ¹³⁷ Cs as Tag. |
| H:16 Ref. J | H. Lassen and E. Rasmussen | On splitting herring in Kattegat-Skagerrak into spring and autumn spawners based on length and vertebral counts |
| H:17 | G. Pestana | Population structure and commercial catches composition of sardine (Sardina pilchardus) in the Portuguese coast (ICES Div. IXa) |
| H:18 | G. Pestana | A review of the Portuguese sardine fishery (ICES Div. IXa) |
| H:19 Ref. L | A. Farinha and M.F. Borges | Daily egg production of horse mackerel (<i>Trachurus trachurus</i>) in Portuguese area (Div. IXa) |
| H:20 Ref. D | A.G. Murta and M.F. Borges | Factors affecting the abundance distribution of horse mackerel (<i>Trachurus trachurus</i> Linnaeus, 1758) in the Portuguese waters (Division IXa) |
| H:21 | | Withdrawn |

H - PELAGIC FISH COMMITTEE

| H:22 | E.J. Simmonds et al. | 1993 ICES co-ordinated acoustic survey of ICES Divisions IVa, IVb and VIa |
|-------------------|---|--|
| H:23 Ref. C, L | W.A. Montevecchi and R.A. Myers | Cold water events and shifts in pelagic food webs |
| H:24 | | Report of the International Bottom Trawl Survey in the North Sea, Skagerrak and Kattegatt in 1994: Quarter 1 |
| H:25 | K. Patterson andD. Beveridge | Report of the herring larvae surveys in the North Sea and Adjacent Waters in 1993/1993 |

REFERENCE PAPERS: A:7, A:9, A:10, B:3, B:17, B:19, B:28, D:1, D:10, D:11, D:14 E:16, G:3, G:6, G:37, G:42, J:9, J:10, J:11, J:12, J:16, J:20, J:21, K:8, L:14, L:16, L:20, L:23, M:5, N:4, N:12, N:14

J - BALTIC FISH COMMITTEE

| J:1 | | Report of Activities |
|------------------------------------|--|--|
| J:2 | | Withdrawn |
| J:3 | | Withdrawn |
| J:4 | | Planning Group for Hydroacoustic Surveys in the Baltic |
| J:5 | | Report of the Workshop on Baltic Cod Age Reading |
| J:6 | | Report of the Study Group on the Evaluation of Baltic Fish Data |
| J:7 | | Withdrawn |
| J:8 | | Withdrawn |
| J:9 Ref. H | G. Kornilovs | Yearly length distribution of herring in the Gulf of Riga in relation to populational structure of the stock |
| J:10 Ref. H | F. Shvetsov and A. Rudneva | The growth and feeding of sprat in eastern Baltic |
| J:11 Ref. H | V. Tshervonsev et al. | The eastern Baltic herring invaded by <i>Anisakis Simplex</i> (Rudolphi, 1809) larvae |
| J:12 Ref. H | V. Tshervontsev et al. | Herring spatial distribution depending on food factor |
| J:13 Ref. B | | Report of the Acoustic Survey in ICES Sub. Div. 21, 22, 23 and 24 in September/October 1993 |
| J:14 Ref. D, G | H. Müller | Recruitment of western Baltic Cod |
| J:15 | O. Bagge et al. | Growth and abundance of dab and abundance of plaice in Århus Bay in relation to oxygen conditions 1953-1993 |
| J:16 Ref. H | F. Arrhenius and S. Hansson | Functional response by young-of-the-year Baltic Sea herring (Clupea harengus) |
| J:17 Ref. L | A. Krajewska-Soltys and T.B. Linkowski | Densities of potential prey for cod larvae in deep-water basins of the southern Baltic |
| J:18 Ref. L | P. Margonski and K. Horbowa | Co-occurrence of medusae and cod eggs in the Bornholm Basin |
| J:19 Ref. G, L Poster | M. Kowalewska- Pahlke | Food composition of young cod sampled in the 1993-1994 young fish surveys |
| J:20 Ref. F, G, H | B. Draganik et al. | Results of the screening of fish diseases in the southern Baltic |
| J:21 Ref. H | T. Raid | Structure of Estonian herring catches in the Gulf of Finland |

J - BALTIC FISH COMMITTEE

| J:22 | | Withdrawn |
|-------------------|---|--|
| J:23 Poster | L. Vallin andA. Nissling | Early cell cleavages and their importance for further development in eggs from Atlantic and Baltic cod (Gadus morhua) |
| J:24 Ref. G, L | B.R. MacKenzie et al. | The contribution of abiotic factors during the pelagic stages to interannual variability in settled 0-group plaice (<i>Pleuronectes platessa</i>) abundance in the Kattegat. |
| J:25 Poster | A. Nissing and L. Vallin | The ability of Baltic cod eggs to maintain neutral buoyancy and the opportunity for survival in fluctuating conditions in the Baltic Sea |

REFERENCE PAPERS: A:7, A:9, A:10, D:1, D:10, D:11 H:3, H:7, H:13, H:15, H:16, L:14, L:20, M:8, M:11, M:15, Assess:10, Env:9

K - SHELLFISH COMMITTEE

| K:1 | such the content of the following section is | Report of Activities |
|----------------|--|--|
| K:2 | | Withdrawn |
| K:3 | | Report of the Study Group on Life History, Population Biology, and Assessment of <i>Crangon</i> |
| K:4 | | Report of the Study Group on the Biology, Life History, and Assessment of Majiid Crabs |
| K:5 | | Report of the Study Group on Spatfall and Recruitment in Bivalve Stocks |
| K:6 | | Report of the Study Group on Life Histories and Assessment Methods of <i>Pandalus</i> Stocks |
| K:7 | | Report of the Study Group on the Life History and Assessment of Cephalopods |
| K:8 | | Report of the Study Group on Life Histories and Assessment of <i>Pandalus</i> Stocks in the North Atlantic |
| K:9 | | Report of the Study Group on Life Histories and Assessment Methods <i>Nephrops</i> stocks |
| K:10 | P.T. Goulletquer et al. | Mussel (Mytilus edulis) culture management along the Normandy coastline (France): Stock assessment and growth monitoring |
| K:11 | J.P. Hillis | Advances in the ageing of Nephrops norvegicus |
| K:12 | S. Kuzmin and S. Olsen | Barents Sea king crab (Paralithodes camtschatica). The transplantations were successful |
| K:13 | J.K.T. Brodziak and W.K. Macy | Revised estimates of growth of long-finned squid, <i>Loligo pealei</i> , in the Northwest Atlantic based on statolith ageing: Implications for stock assessment and fishery management |
| K:14 Ref. L | J.R. Weinberg and L. Hendrickson | Factors associated with recruitment of the Atlantic surfclam, Spisula solidissima (Dillwyn) |
| K:15 | T. Neudecker and U. Damm | Regional abundance indices of Brown Shrimp (<i>Crangon crangon</i> L.) at the West Coast of Schleswig-Holstein, North Sea |
| K:16 | E. Hoffmann and P.S. Kristensen | Assessment trials on a blue mussel population in a Danish fjord |
| K:17 Poster | J. Pellerin- Massicotte | Validation and calibration of the responses of biomarkers in an estuarine ecosystem |
| K:18 Ref. H | F. Shahidi | Utilization of marine processing discards and underutilized species |
| K:19 | G.Y. Conan and P. Noël | Report of the first meeting of the International Workshop on Majid Crab Biology |

K - SHELLFISH COMMITTEE

| K:20 Ref. C, L Poster | M. Rasero | Relationship between cephalopod abundance and upwelling: The case of <i>Todaropsis eblanae (Cephalopoda: Ommastrephidae)</i> in Galician waters (NW Spain) |
|------------------------------------|--|---|
| K:21 | P.R. Boyle and G.J. Pierce | Reproductive strategies of the squid <i>Loligo forbesi</i> (Cephalopoda: Loliginidae) |
| K:22 Poster | G.J. Pierce et al. | Distribution and abundance of the fished population of <i>Loligo</i> forbesi in Scottish waters: analysis of research cruise data |
| K:23 Poster | J. Norman et al. | Preliminary molecular genetic analysis of stock structure in the squid <i>Lolio forbesa</i> (Steenstrup) |
| K:24 Poster | K. Siegert et al. | Application of biochemical indices to measure growth rates in cephalopods |
| K:25 Ref. D, G | G. Stéfansson et al. | The use of a stock production type model in evaluating the offshore <i>Pandalus borealis</i> stock of North Icelandic waters, including the predation of northern shrimp by cod |
| K:26 | | Withdrawn |
| K:27 | | Withdrawn |
| K:28 | | Withdrawn |
| K:29 | V. Hernándes-García and J.J. Castro | A note about the DML distributions and catches of Sepia bert- heloti (Cephalopoda: speiidae) on the Saharan bank |
| K:30 | E. González- Gurriarán and J. Freire | Habitat, movements and migration of the spider crab <i>Maja</i> squinado in the Ria de Arousa (NW Spain). Preliminary data using ultrasonic telemetry. |
| K:31 Poster | E. González- Gurriarán <i>et al</i> . | Growth at moult and moulting seasonality of the spider crab <i>Maja squinado</i> (Decapoda: Majidae) in experimental conditions |
| K:32 | F. M. Porteiro and J.J. Gonçalves | Biology of <i>Loligo forbesi</i> (Mollusca: Cephalopoda) in the Azores: morphometric analyses, relative growth and growth by length frequency progression |
| K:33 | M.M. da Cunha and A. Moreno | Octopus vulgaris: Its potential on the Portuguese coast |
| K:34 Ref. G | D. B. Bennett and A. R. Lawler | Irish Sea and <i>Nephrops</i> interactions - can the model be validated? |
| K:35 | T.A. Abrajano et al. | ¹³ C/ ¹² C ratios in individual fatty acids of marine mytilids: molecular-level tracers of dietary sources and strategies |
| K:36 Poster | J.A.A. Perez and R.K. O'Dor | Critical transitions in gladius reconstructed early growth histories of short-finned squid, <i>Illex illecebrosus</i> |
| K:37 Poster | M. Aschan et al. | Results of Norwegian and Russian investigations of shrimp (Pandalus borealis) in the Barents Sea and the Svalbard area 1993, compared with earlier studies |
| K:38 | S. Tr. Einarsson | The Distribution and density of green sea urchin (Strongylocentrotus droebachiensis) in Icelandic Waters |

K - SHELLFISH COMMITTEE

| K:39 | G.G. Thorarinsdóttir and S. Tr. Einarsson | Distribution, abundance, populations structure. Meat yield, size of sexual maturity and sex ratio of the ocean quahog <i>Artica</i> islandica in Icelandic waters |
|------|---|---|
| K:40 | | Withdrawn |
| K:41 | A.M. Caramelo and F. Cardador | Comparison of VPA Results using two methods for conversion of length to age for <i>Nephrops</i> stocks in Portuguese waters (ICES, DIV. IXA) |
| K:42 | O. Bagge et al. | Comparative bottom sampling using "Haps" and "Petersen" samplers |
| K:43 | F. Redant | Sexual maturity of female Norway lobster (Nephrops norvegicus) in the central North Sea |
| K:44 | R. Redant and H. Polet | Results of a study on the Belgian <i>Nephrops</i> fishery in the Central North Sea |
| K:45 | S.A. Organesyan | Biological characteristics and time of Icelandic scallop <i>Chlamys islandica</i> spawning on the Kanin bank and off the Bear Island-Spitsbergen |
| K:46 | N. Clare Eno | Monitoring of temperature regimes to which the Pacific oyster Crassostrea gigas is subject in coastal inlets in relation to their reproductive success |

REFERENCE PAPERS: B:12, B:14, B:20, B:32, B:39, E:17, F:9, F:15 (poster), G:29, M:5

L - BIOLOGICAL OCEANOGRAPHY COMMITTEE

| L:1 | | Report of Activities, 1993 |
|--------------------|-------------------------------------|--|
| L:2 | | Publications of interest to the Biological Oceanography Committee, 1993 |
| L:3 Ref. C | | Report of the Study Group on Seabird/Fish Interactions 1993 |
| L:4 | | Report of the Benthos Ecology Working Group |
| L:5 Ref.C | | Report of the ICES/IOC Working Group on Harmful Algal Bloom Dynamics |
| L:6 Ref. E | | Report of the Working Group on Phytoplankton Ecology |
| L:7 | | Report of the Study Group on Methods of Spatial and Temporal Integration — Withdrawn |
| L:8 | | Report of the Study Group on Zooplankton Production |
| L:9 | | Report on the Laboratory Workshop on Calanus, for 2-3 weeks in April/May 1994 |
| L:10 | | Report of the Workshop on Trans-Latitudinal Study of Calanus finmarchicus in the North Atlantic |
| L:11 Ref.C | | Joint Session of the ICES/IOC Working Group on Harmful Algal Bloom Dynamics and the Working Group on Shelf Seas Oceanog- raphy |
| L:12 | | Report of the Working Group on Recruitment Processes |
| L:13 | | Report of the OCES/IOC Workshop on Intercomparison of <i>in situ</i> Growth Rate Measurements (Dinoflagellates) |
| L:14 Ref. G,H,J | | Report of the Study Group on Fishbase |
| L:15 | | Report of the Study Group on Gulf III Sampler Efficiency |
| L:16 Ref. G, H | Maria H. Alfonso et al. | Study of the ichthyoplankton of commercial species off Portuguese continental coast |
| L:17 Ref. M | Sabine Alshuth and R. Grant Gilmore | Salinity and temperature tolerance limits for larval spotted seatrout <i>Cynoscion nebulosus</i> C. (Pisces: Sciaenidae) |
| L:18 | K. Sherman et al. | Zooplankton prey field variability during collapse and recovery of pelagic fish in the Northeast Shelf Ecosystem |
| L:19 | K. Sherman | Sustainability, biomass yields, and health of coastal ecosystems: An ecological perspective |
| L:20 Ref. H, J | H. Müller and B. Klenz | Quantitative analysis of Rügen spring spawning herring larvae surveys with regard to the recruitment of the western Baltic and Division IIIa Stock |

| L:21 | E. Gaard | Advection and seasonal development of the copepod <i>Calanus</i> finmarchicus on the Faroe Plateau |
|--------------------------|----------------------------------|---|
| L:22 Ref. D | W. Melle and H.R. Skjoldal | Spawning and development of Calanus spp. in the Barents Sea |
| L:23 Ref. H | J.M. MacGregor and E.D. Houde | Onshore-offshore pattern and variability in distribution and abundance of bay anchovy, <i>Anchoa mitchilli</i> , eggs and larvae in Chesapeake Bay |
| L:24 | Ø. Kaasa and K. Gudmundsson | Seasonal variations in the plankton community in Eyjafjörður, North Iceland |
| L:25 Ref. G | P. Solemdal et al. | Field investigations of the maternal effects in Arcto-Norwegian cod (Gadus morhua L.) on the eggs and early larvae in Lofoten during March-April 1994 |
| L:26 Ref. G Poster | P. Ouellet et al. | Cod (Gadus morhua) spawning and vertical egg distribution in the northern Gulf of St. Lawrence |
| L:27 Ref. C,E,G | H.J. Lindeboom et al. | (Sudden) changes in the biota of the North Sea: Oceanic influences underestimated? |
| L:28 Poster | C. Veeschkens et al. | Distribution of plankton parameters in the northeastern North Sea in relation to vertical physical structures (Campaigns ECOFRONT 88 and 94). |
| L:29 | K.G. Foote | Comparison of equal-area cylindrical and circular piston transducers |
| L:30 | K.G. Foote | Performance of an acoustic sonde design |
| L:31 Poster | A.I. Agatova et al. | Biochemical monitoring of marine ecosystems |
| L:32 | | Withdrawn |
| L:33 Ref. Pub. | J.A. Lindley | ICES Identification Leaflets for Plankton. Editors Report 1993/1994. |
| L:34* | | Report of the Study Group on Seabird/Fish Interactions September 1994 |

REFERENCE PAPERS: A:7, A:9, A:10, B:40, C:1, C:5, E:9, E:10, E:18, G:9, G:33, H:19, H:23, J:17, J:18, J:19, J:24, K:20 (poster), N:4

M - ANACAT FISH COMMITTEE

| M:1 | | Report of Activities, 1993 |
|------------------|----------------------------------|---|
| M:2 | | Publications of interest to the Anadromous and Catadromous Fish Committee, 1993 |
| M:3 Ref. F | | Report of the Study Group on Interactions of Wild, Ranched (Enhanced), and Reared Salmon |
| M:4 | | Report of the Study Group on Anadromous Trout |
| M:5 Ref.G,H.K | | Report of the Study Group on Identification Protocols for Fin-fish and Shellfish |
| M:6 | | Report of the Workshop of Salmon Spawning Stock Targets in the North-East Atlantic |
| M:7 | K. Friedland and R.E. Haas | Patterns of post-smalt growth and early maturation of Atlantic salmon (Salmo salar) |
| M:8 Ref. J | Ari Saura | Stocking results of the cultivated rainbow trout (Oncorhynchus mykiss) smolt in the Gulf of Finland |
| M:9 | N. O'Maoileidigh et al. | Exploitation of reared salmon released into the Burrishoole river system |
| M:10 | N. O'Maoileidigh et al. | High seas and homewater exploitation of an Irish reared salmon stock |
| M:11 Ref. J | E. Ikonen et al. | Results of a blindfold test on Baltic salmon (Salmo salar L.) scale reading |
| M:12 Ref. J | E. Ikonen | Withdrawn |
| M:13 | L.P. Hansen et al. | The incidence of farmed Atlantic salmon in the long-line fishery at Faroes and in Norwegian home waters |
| M:14 | S. Gudjonsson and H. Gudmundsson | Development and testing of a new light gate fish counter in rivers |
| M:15 | | Withdrawn |
| M:16 Ref. F | G. Blanco et al. | Genetic variation and age at maturity in populations of Atlantic salmon of northern Spain |
| M:17 | L. Karlsson et al. | Timing of the Poltic colmon run in the Gulf of Rothnia Influ- |
| | D. Rulisson et at. | Timing of the Baltic salmon run in the Gulf of Bothnia. Influence of environmental factors on annual variation. |
| M:18 | B. Rurisson et at. | |
| M:18 M:19 | Ö. Karlström and P. Byström | ence of environmental factors on annual variation. |
| | Ö. Karlström | ence of environmental factors on annual variation. Withdrawn |

M - ANACAT FISH COMMITTEE

| M:22 | P. Debowski | Homing of tagged sea (Salmo trutta L.) smolts trout released into Polish rivers |
|----------------|---------------------------------|---|
| M:23 | J. Domagala and H. S. Farynjarz | Number of Pyloric Caeca as Possible Marker of Trout (Salmo trutta m. trutta L.) Stocks in Pomeranian Rivers |
| M:24 | A.V. Zubchenko | Salmon rivers of the Kola Peninsula. Their reproductive potential and Atlantic salmon stock state in the river Tuloma |
| M:25 | A.V. Zubchenko | Salmon rivers of the Kola Peninsula. Analysis of status and possible measures to manage population structure of Atlantic salmon in the Kola river |
| M:26 | D. Dunkley et al. | Withdrawn |
| M:27 Ref. F | I.A. Sanchez et al. | Relationships between genetic variability and precocious maturity and smolting in Atlantic salmon |
| M:28 | | ICES Compilation and Microtag, Finclip and External Tag |

REFERENCE PAPERS: F:17, L:17, Assess:10, Assess:15, Assess:16, Env.:9

N - MARINE MAMMALS COMMITTEE

| N:1 | | Report of Activities 1993 |
|--------------------------------|------------------------------|--|
| N:2 Ref. E | | Study Group on Seals and Small Cetaceans in European Seas |
| N:3 | | Publications of interest to the Marine Mammals Committee |
| N:4 Ref. H, L | Finn O. Kapel | Variation in the feeding of harp seals (Phoca groenlandica) in the Southwest Greenland waters |
| N:5 Ref. B, D Poster | Finn O. Kapel | A review of recoveries in Greenland of tagged or branded harp and hooded seals |
| N:6 | S. Northridge and T.D. Smith | The use of a geographical information system in analysing and representing catch or sightings data |
| N:7 | F. Shahidi and J. Synowiecki | Potential benefits and quality characteristics of carcass components of harp seal (<i>Phoca groenlandica</i>) |
| N:8 | G.B. Stensson | Pup production and population growth of hooded seals (Cystophora cristata) Near Newfoundland, Canda |
| N:9 Poster | B. Sjare and G.B. Stenson | Comments on Incidental Catches of Seals in the Newfoundland Gillnet Fishery |
| N:10 | A. Garcia-Castrillo et al. | Les mammifères marins du Nord et du Nord-Ouest de L'Espagne en 1993 |
| N:11 Poster | M.B. Santos et al. | Diets of small cetaceans stranded from the Scottish coast |
| N:12 Ref. G, H | K.T. Nilssen et al. | Studies of food availability and diet of harp seals (<i>Phoca groenl-andica</i>) in the southeastern Barents Sea in February 1993 |
| N:13 | | Withdrawn |
| N:14 Ref.H,G,L Rec. abs. | T. Haug et al. | Studies of minke whale (<i>Balaenoptera acutorostrata</i>) ecology in the Northeast Atlantic: Description of the 1993 scientific catch operations and preliminary results from stomach analyses and resource surveys |
| N:15 | | Withdrawn |
| N:16 | V. Hernándes-García et al. | Stomach contents of two short-finned pilot whale (<i>Globicephala macrorhynchus</i> Gray, 1846) (Cetacea, Delphinidae) off the Canary Islands: A preliminary note |

REFERENCE PAPER: A:8

MINI-SYMPOSIUM ON FISH MIGRATION (MINI)

| Mini:1 | D.W. Kulka et al. | Changes in the winter distribution and migration patterns of northern cod (Gadus morhua) on the Newfoundland Labrador Shelf as determined from commercial fisheries data |
|-------------------|-----------------------------------|--|
| Mini:2 | D.P. Swain | Changes in the distribution of Atlantic cod (<i>Gadus morhua</i>) in the southern Gulf of St Lawrence: environmental change or change in preference? |
| Mini:3 | S.J. Smith and F. Page | Interannual trends in the association between groundfish and hydrographic variables: implications for management |
| Mini:4 | K. Drinkwater | Environmental changes in the Labrador Sea and their effect on fish stocks |
| Mini:5 | N.L. Shackell et al. | Diel vertical migration of capelin (Mallotus villosus) and its effect on acoustic estimates of density |
| Mini:6 | M. Castonguay et al. | Is there a role of ocean environment in American and European eel decline? |
| Mini:7 | M. Healy et al. | Biophysical controls of salmon migration and production in the Northeast Pacific |
| Mini:8 | M. Walsh et al. | Distribution and environment of the western mackerel stock north of Scotland in January 1994 |
| Mini:9 | M.T. Hafsteinsson and O.A. Misund | Mapping the migration pattern of schooling fish by use of multi- beam sonar during conventional acoustic surveys |
| Mini:10 | M. Castonguay and D. Gilbert | Effects of tidal streams on migrating Atlantic mackerel, Scomber scombrus |
| Mini:11 | J.D. Metcalfe et al. | The migratory behaviour of plaice in the North Sea as revealed by data storage tags. |
| Mini:12 | O.R. Godø et al. | The use of transplantation - tagging-experiments in studies of migratory diversity of cod off Norway |
| Mini:13 | G.A. Rose et al. | Tracking cod migration on the NE Newfoundland shelf: 40 days at sea in 1992 |
| Mini:14 | | Withdrawn |
| Mini:15 Poster | H. Gislason and P. Sparre | Some thoughts on the incorporation of areas and migrations in MSVPA |
| Mini:16 | A.D. Rijnsdorp and M. Pastoors | A simulation model of the spatial dynamics of North Sea plaice (Pleuronectes platessa L.) based on tagging data |
| Mini:17 | G.P. Arnold and B.H. Holford | A computer simulation model for predicting rates and scales of movement of demersal fish on the European continental shelf |
| Mini:18 Poster | B. Villamor and C. Porteiro | Distribution and seasonality of mackerel (Scomber scombrus) in the Cantabrian Sea and Galician waters (ICES Division VIIIc and sub-division IXa North) |

MINI-SYMPOSIUM ON FISH MIGRATION (MINI)

| Mini:19 Poster | J.D. Metcalfe et al. | The Lowestoft data storage tag used in studies of fish migration |
|-------------------|----------------------|---|
| Mini:20 | | Withdrawn |
| Mini:21 | J.S. Gunn et al. | The development and use of archival tags for studying the migration, behaviour and physiology of southern bluefin tuna, with an assessment of the potential for transfer of the technology to groundfish research |

THEME SESSION ON NON-TARGET SPECIES (O)

| O:1 Poster | H.J.L. Heessen | Bluemouth (Helicolenus dactylopterus): a new species in the North Sea? |
|---------------|------------------------------------|---|
| O:2 Poster | H.J.L. Heessen and Paddy Walker | Distribution and biology of four ray species in the North Sea |
| O:3 | H. Heessen and N. Daan | Distribution and abundance of grey gurnard (Eutrigla gurnardus) in the North Sea |
| O:4 | M. Vecchione et al. | Distribution and biology of non-commercial cephalopod species from the Northeastern Continental Shelf of the United States |
| O:5 | | Withdrawn |
| O:6 | G.K. Lilly et al. | Distribution and abundance of polar cod (<i>Boreogadus saida</i>) off southern Laborador and Eastern Newfoundland |
| O:7 Poster | Å. Dagrunn Wik and O.A. Bergstad | Distribution, size composition and trophic ecology of velvet belly (Etmopterus spinax, L. 1758) and rabbit fish (Chimaera monstrosa L., 1758) in the Norwegian Deep |
| O:8 | O.T. Albert et al. | Long rough dab (Hippoglossoides platessoides) of the Barents Sea and Svalbard area: ecology and resource evaluation |
| O:9 | M.S. Shevelev | Migration pattern of spotted catfish (Anarhicnas minor Olafsen) in the Barents Sea and adjacent waters |
| O:10 | K.M. Sokolov and M.S. Shevelev | New findings of egg clutches of wolffish (Anarhicas spp.) in the Barents Sea |
| O:11 | N.V. Mukhina | Distribution and abundance dynamics of larvae of non-target fish species in the northeastern Norwegian and southwestern Barents Sea |
| O:12 | A.V. Dolgov | Some aspects of biology of non-target fish species in the Barents Sea |

THEME SESSION ON MULTISPECIES INTERACTIONS OF IMPORTANCE TO THE GROUNDFISH ABUNDANCE FLUCTUATIONS (P)

| P:1 | P.A. Livingston | Overview of multispecies interactions involving walleye pollock in the eastern Bering Sea and Gulf of Alaska |
|------|-----------------------------------|--|
| P:2 | S.A. Pedersen | Multispecies interactions on the offshore West Greenland shrimp grounds |
| P:3 | M.J. Fogarty and J.K. Brodziak | Multivariate time series analysis of fish community dynamics on Georges Bank |
| P:4 | G.T. Waring | Spatial and temporal patterns in harbor seal entanglements in the Gulf of Maine sink gillnet fishery |
| P:5 | E. Grunwald and F. Köster | Feeding habits of Atlantic cod in West-Greenland waters |
| P:6 | | Withdrawn |
| P:7 | M. Shima et al. | A spatial model of marine mammal fishery interactions in the Gulf of Alaska, USA and comparisons to other ecosystems |
| P:8 | G.Y. Conan | Can simple linear correlation analysis satisfactorily detect environmental or interspecific effects on fisheries landings in a chaotic oceanic universe? |
| P:9 | I. Olaso et al. | Influence of anchovy and blue whiting in the feeding of northern Spain hake |
| P:10 | | Withdrawn |
| P:11 | B.K. Mohn and W.D. Bowen | A Model of grey seal predation on 4VSW cod and its effects on the dynamics and potential yield of cod |
| P:12 | O.P. Pedersen | A multispecies model of a fjord system |
| P:13 | | Withdrawn |
| P:14 | P.D. Spencer and Jeremy S. Collie | Modeling seasonally predation in marine environments |

THEME SESSION ON IMPACT OF THE 1993 MAJOR INFLOW TO THE BALTIC SEA (Q)

| Q:1 | W. Matthäus and H. Schinke | Mean atmosphere circulation patterns associated with major Baltic inflows |
|-----------------------------|------------------------------|---|
| Q:2 | W. Fennel and T. Seifert | Dynamics of the transition area between the Baltic Sea and the North Sea |
| Q:3 | W. Matthäus et al. | Effects of the inflows of salt-rich water during 1993 and early 1994 in the Central Baltic Sea |
| Q:4 Ref. C. | H. Westerberg | The transport of cod eggs and larvae through Öresund |
| Q:5 | B. Klenz | Distribution of ichtyplankton in the Western Baltic regarding cod recruitment |
| | | |
| Q:6 | | Withdrawn |
| Q:6 Q:7 Poster | B. Hekansson and B. Carlsson | Withdrawn Exchange of salt and water volumes taking place between the North Sea and the Baltic Sea through the Sound in 1993 |
| Q:7 | | Exchange of salt and water volumes taking place between the |

THEME SESSION ON PELAGIC FISH AND PLANKTON INTERACTIONS IN MARINE ECOSYSTEMS (R)

| R:1 | J. Luo and B. Brandt | Virtual reality of planktivores: Are fish really size selective? |
|---------------|-------------------------------|--|
| R:2 | W. Silvert | Bloom dynamics in marine food chain models with migration |
| R:3 | | Withdrawn |
| R:4 Poster | R.J.P Meschishnick et al. | Ingestion of microbial prey by fish larvae |
| R:5 Poster | V. Puvanendran and J.A. Brown | Differential response of longitudinally separate populations of cod larvae (Gadus morhua) to light levels |
| R:6 Poster | V. Gotceitas et al. | An investigation of the match/mismatch hypothesis with Atlantic cod larvae |
| R:7 | Ø. Fiksen et al. | Spatial patterns of capelin habitat profitability in the Barents Sea |
| R:8 | H. Gjøsæter et al. | Interactions between the capelin stock and the zooplankton in the Barents Sea ecosystem |
| R:9 | W. Melle et al. | Feeding and migration of Norwegian spring spawning herring in the Norwegian Sea |
| R:10 | V. Wespestad et al. | Juvenile sockeye salmon (<i>Oncorhyrchus nerka</i>) predation on Bering Sea red king crab (<i>Paralithodes camtschatica</i>) larvae as a cause of recruitment variation |
| R:11 | | Withdrawn |
| R:12 | G.Y. Conan et al. | Is match/mismatch the universal ill fated mechanism de-regulating stock/recruitment models? Snow crab (<i>Chionoecetes opilio</i>) prove that some species may precisely sense optimal plankton production for a timely release of their larvae. |

THEME SESSION ON LARGE-SCALE CIRCULATION CHANGES IN THE NORTH ATLANTIC ON TIME SCALES OF CLIMATIC CHANGES (S)

| S:1 | | Withdrawn |
|------------------|--------------------------------|---|
| S:2 | G. Ottersen et al. | Statistical modelling of temperature variability in the Barents Sea |
| S:3 | A. Lavin et al. | Decadal time changes in the circulation at 24°N in the Atlantic Ocean |
| S:4 | B. Hansen and R. Kristiansen | Long-term changes in the Atlantic water flowing past the Faroe Islands |
| S:5 | B. Hansen et al. | Bottom temperature between Iceland and Shetland 1906-1962 measured in telegraph cables |
| S:6 | S. Levitus et al. | Interannual variability of upper ocean thermal structure of the North Atlantic |
| S:7 | K.P. Koltermann and K. Warrach | Large scale changes in the North Atlantic circulation on decadal time-scales at intermediate depths |
| S:8 | S-Å Malmberg et al. | Long time series in Icelandic waters in relation to physical variability in the northern North Atlantic |
| S:9 | I.M. Yashayaev | On the year-to-year variability of Newfoundland basin hydrological fields, from 12-years field experiments (1980-1992) |
| S:10 | S.S. Lappo et al. | Long-period changes in the intermediate and deep water circulation in the North Atlantic |
| S:11 Poster | U.V. Paul and A. Sy | Differences of properties and circulation in the North Atlantic from two long hydrographic sections between Greenland and Ireland |
| Reference paper: | | |
| L:10 | | Report of the Workshop on Trans-Latitudinal Study of <i>Calanus finmarchicus</i> in the North Atlantic, 6-8 April 1994, Oslo, Norway |

THEME SESSION ON IMPROVING THE LINK BETWEEN FISHERIES SCIENCE AND MANAGEMENT: BIOLOGICAL, SOCIAL AND ECONOMIC CONSIDERATIONS (T)

| T:1 | J.F. Caddy | Checks and balances in the management of marine fish stocks: Organizational requirements for a limit reference point approach |
|-----------------------|-------------------------------|--|
| T:2 | Gérard Biais | A decade of fisheries resources management by TACs in European Community waters from 1983 to 1992 |
| T:3 | | Withdrawn |
| T:4 | G. Palsson and A. Helgason | Figuring fish and measuring men: The quota system in the Icelandic cod fishery |
| T:5 | | Withdrawn |
| T:6 | R. Townsend | Comprehensive property rights: Fishery trusts |
| T:7 Poster | E. Thunberg and Thomas Helser | An age-structured bioeconomic model to evaluate changes in mortality in the United States Atlantic silver hake fishery |
| T:8 Poster | L. Richards and J. Fargo | Comparing data collected by observers and skippers in the British Colombia trawl fishery |
| T:9 Poster | Per J. Sparre | The data requirements for basic fisheries bio-economics |
| T:10 | P.M. Clay and J.R. McGoodwin | Utilizing social sciences in fisheries management |
| T:11 | J.P. Hillis and M O'Morchoe | Restoring a depleted fishery by different methods including mesh control, decommissioning and individual quota; a biosocio-economic comparison |
| T:12 Poster | A.M. Powers | The work of culture and the culture of work: some considerations for decision making in the fisheries |
| T:13 | | Withdrawn |
| T:14 | A.K. Veim et al. | Bycatch of juvenile fish in the shrimp fishery - management based on bioeconomic criteria |
| T:15 | B.J. McCay | Individual transferable quotas in clams and fish: a comparative analysis |
| T:16 | A.B. Hollowed et al. | An examination of marine mammal and walleye pollock fisheries interactions in the Gulf of Alaska using a stochastic bioeconomic simulation model |
| T:17 | W. Dubinsky | Agency, structure and the interactive dimension of fisheries management: the regulated vs. the regulator |
| T:18 | G.G. Thompson | A general diffusion model of stock-recruitment systems with stochastic mortality |
| T:19 Poster | G.M. Jansson et al. | A bio-economical model for north sea flatfish |

THEME SESSION ON IMPROVING THE LINK BETWEEN FISHERIES SCIENCE AND MANAGEMENT: BIOLOGICAL, SOCIAL AND ECONOMIC CONSIDERATIONS (T)

| T:20 | A. Maurstad and J.H. Sundet | Improving the link between science and management: drawing upon local fishers' experience |
|----------------|--------------------------------|---|
| T:21 | D. Symes and K. Crean | Social objectives, social research and the re-calibration of management policies in fisheries: the case of the European Union |
| T:22 | J.M. Ward | A description and evaluation of the individual transferable quota (ITQ) fisheries management program for the south Atlantic-wreckfish (<i>Polyprion americanus</i>) fishery |
| T:23 | | Withdrawn |
| T:24 | K. Weber | Analysis of decision-making processes in the ivoirian maritime fisheries sector |
| T:25 Poster | I.M. Kaplan and C. Boyer | Ecological and policy trends related to the North Atlantic conch (BUSYCON) fishery |
| T:26 | A.I.L. Payne and K.L. Cochrane | Managing fisheries in a changing society with a well-developed science base |
| T:27 | C. Creed et al. | ITQ;s community and construction: The case of the Scotia- Fundy inshore mobile gear groundfish fishery |
| T:28 | J.F. Kearney | Fishers' adaptive strategies, ethnoscience, and local level decision-making: anthropological perspectives on an integrated approach to fisheries science and management |
| T:29 | G. L. Brander and D. L. Burke | Rights-based vs. competitive fishing of sea scallops in Nova Scotia |
| T:30 | D.D. Hoggarth | Management strategies and their sensitivity to parameter uncertainties in a model of artisanal river fisheries |
| T:31 | J. Mørkøre | When long term objectives and short term interests collide |
| T:32 | | Withdrawn |
| T:33 | R.O. Rasmussen | Types of social importance of fisheries |
| T:34 | E. Vestergaard | Obstacles within fisheries |
| T:35 | L. Burke et al. | The Scotia-Fundy inshore dragger fleet ITQ program, background, implementation, and results to date |
| T:36 | E. Hoffmann | A marine ecosystem and an economic and ethnological analysis of the consequences of utilizing its biological resources |
| T:37 Poster | M. Woodrow | Community adaption to fisheries management practices in Newfoundland |
| T:38 | E.M. Smith | The nature of nature: conflict and consensus in fisheries management |
| T:39 | | Withdrawn |

THEME SESSION ON IMPROVING THE LINK BETWEEN FISHERIES SCIENCE AND MANAGEMENT: BIOLOGICAL, SOCIAL AND ECONOMIC CONSIDERATIONS (T)

| T:40 Poster | R.L. Stephenson et al. | The Scale(s) of management: An impediment of linking biological, social and economic consideration in management? |
|-----------------------|---|--|
| T:41 | D.E. Lane and R.L. Stephenson | Fisheries Management Science the framework to link biological, economic and social objectives in fisheries management |
| T:42 | J. Rice and L. Richards | Partnership and roles. The Pacific Canadian rockfish fishery |
| T:43 | G. Stefansson et al. | Utilization of the Icelandic cod stock in a multispecies context |
| T:44 | | Withdrawn |
| T:45 | | Withdrawn |
| T:46 | J.S. Loch and J.B. Jones | An improved link between industry, management and science: a case history - the southern Gulf of St. Lawrence snow crab fishery |
| T:47 Poster | S.E. Squires | Labour recruitment and economic realities in the Newfoundland fishing industry |
| T:48 | JJ. Maguire et al. | Fisheries management is people management: contributions of social science to marine biology and fisheries management |
| T:49 | P. Rodgers | The interface of economics with fisheries science: understanding each others potential contribution to fisheries management |
| T:50 | | Withdrawn |
| | | *************************************** |
| T:51 | J. Catanzano and B. Mesnil | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research |
| T:51 T:52 | | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their |
| | B. MesnilP. Young and | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research An evaluation of the balance of power between government, industry, and science in managing Australia's federal fisheries |
| T:52 | B. Mesnil P. Young and J. Wallace | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research An evaluation of the balance of power between government, industry, and science in managing Australia's federal fisheries (Setting the fox to guard the henhouse) Input controls vs. rights-based fishing: case studies in meeting |
| T:52 T:53 | B. MesnilP. Young andJ. WallaceM. Gardner | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research An evaluation of the balance of power between government, industry, and science in managing Australia's federal fisheries (Setting the fox to guard the henhouse) Input controls vs. rights-based fishing: case studies in meeting resource management objectives Attitudes to risk relative to decisions regarding levels of fish |
| T:52 T:53 T:54 | B. MesnilP. Young andJ. WallaceM. GardnerR. Shotton | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research An evaluation of the balance of power between government, industry, and science in managing Australia's federal fisheries (Setting the fox to guard the henhouse) Input controls vs. rights-based fishing: case studies in meeting resource management objectives Attitudes to risk relative to decisions regarding levels of fish harvesting Rights-based fishing: the role of property rights in fisheries |
| T:52 T:53 T:54 T:55 | B. MesnilP. Young andJ. WallaceM. GardnerR. Shotton | Economics and biology science used in fisheries research or when social and natural sciences try to depict together their object of research An evaluation of the balance of power between government, industry, and science in managing Australia's federal fisheries (Setting the fox to guard the henhouse) Input controls vs. rights-based fishing: case studies in meeting resource management objectives Attitudes to risk relative to decisions regarding levels of fish harvesting Rights-based fishing: the role of property rights in fisheries management |

JOINT SESSION ON QUALITY ASSURANCE OF MARINE MEASUREMENTS

| (C+E+L):1 | L.J. Rickards | BODC Quality assurance procedures for physical oceanographic data |
|-----------|------------------------------|--|
| (C+E+L):2 | S. Carlberg | Quality assurance - What it is and what it is not |
| (C+E+L):3 | L. Hernroth | Quality assurance - a new fashion? Maybe, but certainly a tool to improve the quality of data. |
| (C+E+L):4 | D.E. Wells et al. | Quality assurance of marine measurement QUASIMEME: the first year of an holistic QA project |
| (C+E+L):5 | P.A. Gurbutt and K.J. Medler | Data quality is more than an intercomparison |
| (C+E+L):6 | H.D. Dooley | When data are good they are very yery good, but when they are bad they are horrid. |

JOINT SESSION ONOCCURRENCE AND EFFECTS OF CONTAMINANTS IN MARINE MAMMALS

| (E+N):1 Poster | J. Hellou and G. Stenson | Fluorescing compounds PAH, PCB and biogenic hydrocarbons in muscle, liver, kidney and blubber of marine mammals |
|--------------------------|----------------------------|--|
| (E+N):2 | M.E. Dahlheim | Effects of the Exxon Valdez oil spill on Cetaceans |
| (E+N):3 | J. Utne Skaare et al. | Organochlorine contaminants in marine mammals from the Norwegian Arctic |
| (E+N):4 | O. Espeland et al. | Seasonal variation in organochlorine concentrations in harp seal (<i>Phoca groenlandica</i>) from the Barents Sea region |
| (E+N):5 | L. Kleivane et al. | Organochlorines in harbour porpoise (<i>Phocoena phocoena</i>) from Scandinavian waters |
| (E+N):6 | B. Munro Jenssen et al. | Biomarkers in blood to evaluate biological effects of organochlorines in free-living grey seal pups |
| (E+N):7 Poster | B. Kløven et al. | Body burdens of organochlorines in grey seal pups |
| (E+N):8 Poster | O. Haugen et al. | Vitamin a plasma-status and organochlorine concentration in blood of free-living grey seal pups |
| (E+N):9 | R.J. Law and | Organochlorines in the blubber of bottlenose dolphins (Tursiops |
| | C.R. Allchin | truncatus) and harbour porpoises (Phocoena phocoena) from Cardigan Bay (Wales) and the Moray Firth (Scotland) |
| (E+N):10 | D.E. Wells and C. MCKenzie | |

JOINT SESSION ON ESTIMATING ABUNDANCE FROM FISHING SURVEYS AND ACOUSTIC MEASUREMENTS

| (B+D+G+H):1 I. Røttingen <i>et al</i> . | Acoustic abundance estimation of wintering Norwegian spring spawning herring, with emphasis of methodological aspects |
|---|--|
| (B+D+G+H):2 K.G. Foote | Extinction cross section of herring: New measurements and speculation |
| (B+D+G+H):3 S.J. Smith | Evaluating statistical properties of trawl survey estimates of mean abundance |
| (B+D+G+H):4 G.Y. Conan and F. Maynou | Mapping and assessment of fisheries resources with coastal and depth constraints, the case study of snow crab in the Bay of Islands fjord (Newfoundland) |
| (B+D+G+H):5 E.J. Simmonds | Age structure and estimated mortality as an error indicator for acoustic surveys with information on numbers at age |

ACFM - ADVISORY COMMITTEE ON FISHERY MANAGEMENT

ACFM:1* Agenda, ACFM Consultations at the 1994 Annual Science Conference

ASSESSMENT WORKING GROUP REPORTS - 1994

| Assess:1 | Report of the Working Group on Multispecies Assessment of Baltic Fish |
|-----------|---|
| Assess:2 | Report of the Arctic Fisheries Working Group |
| Assess:3 | Report of the Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assess:4 | Report of the Blue Whiting Assessment Working Group |
| Assess:5 | Report of the Joint ICES/NAFO Working Group on Harp and Hooded Seals |
| Assess:6 | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerral |
| Assess:7 | Working Group on the Assessment of Norway Pout and Sandeel |
| Assess:8 | Report of the Atlanto-Scandian Herring and Capelin Working Group |
| Assess:9 | Report of the Multispecies Assessment Working Group |
| Assess:10 | Report of the Sub-Group of the Baltic Salmon and Trout Assessment Working Group |
| Ref J + M | |
| Assess:11 | Report of the Working Group on Long-Term Management Measures |
| Assess:12 | Report of the Working Group on Nephrops and Pandalus Stocks |
| Assess:13 | Report of the Herring Assessment Working Group for the Area South of 62°N |
| Assess:14 | Report of the Study Group on the North Sea "Plaice Box" |
| Assess:15 | Report of the Baltic Salmon and Trout Assessment Working Group |
| Ref. M | |
| Assess:16 | Report of the North Atlantic Salmon Working Group |
| Ref. M | |
| Assess:17 | Report of the Working Group on the Assessment of Demersal Stocks in the Baltic |
| Assess:18 | Report of the Working Group on the Assessment of Pelagic Stocks in the Baltic |
| Assess:19 | Report of the North-Western Working Group |

ACME - ADVISORY COMMITTEE ON THE MARINE ENVIRONMENT

ACME:1* Agenda, ACME Consultations at the 1994 Annual Science Conference

ENV - ENVIRONMENT-RELATED WORKING GROUP REPORTS

| Env:1 Ref. C+E | Marine Chemistry Working Group |
|-----------------------|---|
| Env:2 Ref.E | Joint Session of the Working Group on Marine Sediments in Relation to Pollution and the Working Group on Biological Effects of Contaminants |
| Env:3 Ref.E | Working Group on Biological Effects of Contaminants |
| Env:4 Ref.E | Working Group on Environmental Assessment and Monitoring Strategies |
| Env:5 Ref.E | Working Group on Marine Sediments in Relation to Pollution |
| Env:6 Ref.D+E | Working Group on Statistical Aspects of Environmental Monitoring |
| Env:7 Ref.F | Working Group on Introductions and Transfers of Marine Organisms |
| Env:8 Ref. E+D | Sub-Group on Temporal Trend Monitoring Programmes for Contaminants in Biota |
| Env:9 Ref. E,F+M,J | Report of the Study Group on Occurrence of M-74 in Fish Stocks |
| Env.10 Ref. C+E | Report of the Steering Group on Integrated Study of Processes of Pollutant Transfer and Effects on Biota — Withdrawn |
| Env. 11 | ICES 1994 Code of Practice on Introductions and Transfers of Marine Organisms |

JOINT MEETING ACFM/ACME

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

Ref. G