### Theme Session L

**Pelagic ecosystem dynamics from integrated monitoring surveys**

Conveners: Sascha Fässler (the Netherlands), Jeroen van der Kooij (UK), and Pierre Petitgas (France)

<table>
<thead>
<tr>
<th>CM Code</th>
<th>Oral Presentations</th>
</tr>
</thead>
</table>
| L: 01 Oral | **Title:** The PELGAS story: from target species biomass assessment to multidisciplinary pelagic ecosystem monitoring  
**Authors:** Mathieu Doray  
**Keywords:** integrated monitoring, pelagic ecosystem, Bay of Biscay, indicators |
| L: 02 Oral | **Title:** Using the Atlantic Zone Monitoring Program (AZMP) to develop indices of bio-physical environmental variability in the context of pelagic fish stock assessments in the Gulf of St. Lawrence, Canada  
**Authors:** Stéphane Plourde, Peter S. Galbraith, François Grégoire, Ian H.A.H. McQuinn, Daniel Duplisea, Martin Castongua  
**Keywords:** monitoring, Atlantic Zone Monitoring Program, Gulf of St. Lawrence, physical environmental conditions, zooplankton, pelagic fish |
| L: 03 Oral | **Title:** Westward feeding range expansion of Northeast Atlantic mackerel from 2007 to 2013: effects of temperature, zooplankton abundance and spawning stock size.  
**Authors:** Anna Olafsdottir  
**Keywords:** NEA mackerel feeding migration, temperature, zooplankton, spawning stock biomass |
| L: 04 Oral | **Title:** Fine-scale dynamics shape the seascape from zooplankton to seabirds  
**Authors:** Daniel Grados  
**Keywords:** oxygen minimum zone; Internal waves; submesoscale; zooplankton; fish; seabirds |
| L: 05 Oral | **Title:** Mediterranean biodiversity (from phytoplankton to top predators) and present threats  
**Authors:** Gabriel Reygondeau  
**Keywords:** biodiversity, anthropogenic pressures, Mediterranean sea, ecological niche model |
| L: 06 Oral | **Title:** Multidisciplinary acoustic surveys with focus on fishes and plankton: how understanding species interaction can support fish stock assessment and management activity.  
**Authors:** Svetlana Kasatkina  
**Keywords:** multidisciplinary acoustic survey, plankton and fishes, species interaction, stock assessment and TAC |
<table>
<thead>
<tr>
<th>CM Code</th>
<th>Oral Presentations</th>
</tr>
</thead>
</table>
| L:07    | **Title:** Evaluating the role of local and basin scale processes in an upwelling ecosystem using time-series observations and biophysical food web modeling  
**Authors:** James Ruzicka  
**Keywords:** coupled biophysical model; food web; time-series observations |
| L:08    | **Title:** Improving the quality of ecosystem data time series for integrated assessment in the Baltic Sea  
**Authors:** Svetlana Kasatkina  
**Keywords:** ecosystem data time series, monitoring surveys, principal components analysis, rebuilding missed observations |
| L:09    | **Title:** Spatial structure of the bay of Biscay pelagic ecosystem in spring as revealed by the pelagic survey series PELGAS  
**Authors:** Pierre Petitgas  
**Keywords:** ecosystem monitoring, multi-table analysis, spatial structure, bay of Biscay |
| L:10    | **Title:** Effect of zooplankton prey on distribution and abundance of North Sea herring (Clupea harengus) larvae: A long term study.  
**Authors:** Santiago Alvarez Fernandez  
**Keywords:** Herring, larvae, recruitment, North Sea, Pseudocalanus, zooplankton, SCAI |
| L:11    | **Title:** Insights on the role of predation in Bay of Biscay anchovy eggs and larvae mortality; development and application of a real-time PCR based assay to potential invertebrate and vertebrate predators.  
**Authors:** Aitor Albaina  
**Keywords:** Predation, Engraulis encrasicolus, Fish eggs, Bay of Biscay, Molecular assay, stomach contents, Sardina pilchardus, Sprattus sprattus, Macrozooplankton |
| L:12    | **Title:** Bay of Biscay sound scattering layers composition  
**Authors:** Barbara Remond  
**Keywords:** multi-frequency, classification, ground-truthing data, gas-bearing organisms, forward/inverse method |
| L:13    | **Title:** Reconstructing of volume densities at several trophic levels by high resolution probing  
**Authors:** Nils Olav Handegard  
**Keywords:** probing, broad band acoustics, optics |
| L:14    | **Title:** Pelagic versus demersal: a process to fully understanding the blue whiting (Micromessistius poutassou) dynamics off the Portuguese coast  
**Authors:** Patrícia Gonçalves  
**Keywords:** blue whiting; survey data; size and sex distribution; demersal vs. pelagic environments; diel variation in abundance |
| L:15    | **Title:** Integrating acoustic and bottom trawl data to obtain spatial distribution and abundance estimates for semipelagic species.  
**Authors:** Stan Kotwicki  
**Keywords:** combined acoustic-bottom trawl survey, semipelagic species, abundance, distribution |
<table>
<thead>
<tr>
<th>CM Code</th>
<th>Oral Presentations</th>
</tr>
</thead>
</table>
| **L: 16 Oral** | Title: On the way towards using hydroacoustic multifrequency techniques to assess Northeast Atlantic mackerel (Scomber scombrus)  
Authors: Tim Kirchner, Matthias Schaber, Matthias Kloppmann, Jens Ullweit, Sascha Fäsler, Jeroen van der Kooij, Axel Temming  
Keywords: target classification, multifrequency hydroacoustic data, mackerel egg survey, daily egg production method |

<table>
<thead>
<tr>
<th>CM Code</th>
<th>Posters</th>
</tr>
</thead>
</table>
| **L: 17 Poster** | Title: Modeling Iberian sardine Early Life Stages dynamics  
Authors: Luz María García-García, Manuel Ruiz-Villarreal and Marcos Cobas-García  
Keywords: hydrodynamic model, biogeochemical model, Lagrangian model, sardine Early Life Stages, recruitment |
| **L: 18 Poster** | Title: Multi-frequency characterization of the 3-dimensional, mesoscale spatial distribution of Biscay sound scattering layers  
Authors: Barbara Remond, Mathieu Doray, Pierre Petitgas, and Laurent Berger  
Keywords: classification method, pelagic ecosystem, sensitivity analysis, multi-frequency response, integrated survey |
| **L: 19 Poster** | Title: Variability in *Engraulis encrasicolus* distribution patterns in the southern Bay of Biscay based on acoustic survey data (1992-2013)  
Authors: Carmen Hernández, B. Villamor, R. González-Quiros, J. Landa, and M.B. Santos  
Keywords: Bay of Biscay, *Engraulis encrasicolus*, generalized additive models |
| **L: 20 Poster** | Title: Pelagic Surveys series for sardine and anchovy in ICES Areas VIII and IX (WGACEGG) 2003-2012 - Towards an ecosystem approach - A Cooperative Research Report  
Authors: Jacques Massé, Andrés Uriarte, Maria Manuel Angelico, and Pablo Carrera  
Keywords: fisheries surveys, survey data products, ecosystem overviews, spatial distributions |
| **L: 21 Poster** | Title: Zooplankton distribution during pelagic surveys in Iberian Atlantic waters using image analysis  
Authors: Maria Manuel Angélico, Luís Sobrinho-Gonçalves, Alexandra Silva, and Vitor Marques  
Keywords: zooplankton distribution, image analysis, pelagic surveys |
| **L: 22 Poster** | Title: Assessing fish assemblages in the coastal pelagic ecosystem by midwater-pelagic trawls carried out during acoustic surveys  
Authors: Gualtiero Basilone, Marco Barra, Rosalia Ferreri, Simona Genovese, Ignazio Fontana, Giovanni Giacalone, Biagio De Luca, Salvatore Aronica, Salvatore Mazzola, and Angelo Bonanno  
Keywords: water circulation, water temperature, acoustic surveys, fish assemblages, Strait of Sicily |
<table>
<thead>
<tr>
<th>CM Code</th>
<th>Posters</th>
</tr>
</thead>
<tbody>
<tr>
<td>L: 23</td>
<td><strong>Poster</strong>&lt;br&gt;Title: Variation in feeding ecology of small pelagic fish (<em>Trachurus trachurus</em>, <em>Sardina pilchardus</em> and <em>Engraulis encrasicolus</em>) in the Western Basin and central Mediterranean Sea using stable isotope analysis&lt;br&gt;<strong>Authors:</strong> Paola Rumolo, Gualtiero Basilone, Marco Barra, Emanuela Fanelli, Monica Calabrò, Simona Genovese, Serena Gherardi, Biagio De Luca, and Angelo Bonanno&lt;br&gt;<strong>Keywords:</strong> stable isotopes, trophic web, <em>Trachurus trachurus</em>, <em>Sardina pilchardus</em>, <em>Engraulis encrasicolus</em>, Strait of Sicily, northern Tyrrhenian Sea</td>
</tr>
<tr>
<td>L: 24</td>
<td><strong>Poster</strong>&lt;br&gt;Title: Geographical variation in the reproductive potential of European anchovy in the central Mediterranean Sea&lt;br&gt;<strong>Authors:</strong> Rosalia Ferreri, Gualtiero Basilone, Angelo Bonanno, Salvatore Aronica, Antonella Gargano, Salvatore Mangano, Antonino Di Maria, and Salvatore Mazzola&lt;br&gt;<strong>Keywords:</strong> <em>Engraulis encrasicolus</em>, histological analysis, reproductive potential, Strait of Sicily, Tyrrhenian Sea</td>
</tr>
<tr>
<td>L: 25</td>
<td><strong>Poster</strong>&lt;br&gt;Title: What is the role of Iberian Sardine in the Portuguese pelagic ecosystem?&lt;br&gt;<strong>Authors:</strong> Tiago Malta, Marta Coll, and Alexandra Silva&lt;br&gt;<strong>Keywords:</strong> foodweb, <em>Sardina pilchardus</em>, SURF index</td>
</tr>
<tr>
<td>L: 26</td>
<td><strong>Poster</strong>&lt;br&gt;Title: Integrating spatial processes into ecosystem models for sustainable utilization of fish resources&lt;br&gt;<strong>Authors:</strong> Henn Ojaveer, Stefan Neuelfeldt, Jan Horbowy, Thorsten Blencanner, Michele Casini, Georgs Kornilovs, Patrick Polte, Christian Möllmann, Eero Aro, Andres Lehmann, Anders Nilsson, and Anders Nissling&lt;br&gt;<strong>Keywords:</strong> Baltic Sea, commercial fish, spatial ecology, ecosystem-based management</td>
</tr>
<tr>
<td>L: 27</td>
<td><strong>Poster</strong>&lt;br&gt;Title: Modelling the variation in larval dispersal of estuarine and coastal ghost shrimp: <em>Upogebia congener</em> in the Gulf of Cadiz&lt;br&gt;<strong>Authors:</strong> R.F.T. Pires, M. Pan, A.M.P. Santos, Á. Peliz, D. Boutov, and A. dos Santos&lt;br&gt;<strong>Keywords:</strong> Decapoda, <em>Upogebia pusilla</em>, <em>Upogebia deltaira</em>, Gulf of Cadiz, larval transport, modelling, ROMS, Ichthyop</td>
</tr>
<tr>
<td>L: 28</td>
<td><strong>Poster</strong>&lt;br&gt;Title: <em>Calanus helgolandicus</em> and a changing climate: Analysis of a 25-year time series from the English Channel&lt;br&gt;<strong>Authors:</strong> Jacqueline Maud, Angus Atkinson, Andrew Hirst, Penelope Lindeque, Claire Widdecombe, Andrea McEvoy, and Rachel Harmer&lt;br&gt;<strong>Keywords:</strong> <em>Calanus helgolandicus</em>, population dynamics, English Channel, Station L4</td>
</tr>
</tbody>
</table>