# Theme Session B

**The contribution of acoustics-derived indices for ecosystem-based fisheries management: technological and analytical challenges and recent advances**

Conveners: Mark Dickey-Collas (The Netherlands), Nils Olav Handegard (Norway), and Verena Trenkel (France)

## Papers/Oral Presentations

| B:01 | **Title:** Patchwork of the spatial distribution of small pelagics off Northwest Africa with non-linear geostatistics  
**Authors:** Cheikh Baye Isselmou and Nicolas Bez  
**Keywords:** small palagic, abundance index, spatial distribution, non-linear geostatistic, Northwest Africa |
| --- | --- |
| B:02 | **Title:** Combining bottom trawl and acoustic data to quantify expected biases in abundance estimates from bottom trawl and acoustic surveys.  
**Authors:** Stan Kotwicki, Alex De Robertis, Jim Ianelli, André E. Punt, and John Horne  
**Keywords:** acoustic-trawl survey, bottom trawl survey, acoustic dead zone, bottom trawl blind zone, effective fishing height, catchability |
| B:03 | **Title:** High resolution acoustic indices of Atlantic herring (*Clupea harengus*) paving the way for inclusion of migration patterns in management considerations of herring in ICES divisions IIIa and sd 22–24  
**Authors:** Karl-Johan Stæhr and Lotte Worsøe Clausen  
**Keywords:** acoustic monitoring, herring migration, stock separation, Skagerrak |
| B:04 | **Title:** Determining herring habitat quality from acoustically derived zooplankton abundance in the Northern North Sea  
**Authors:** Sascha M. M. Fässler, Lorna R. Teal, Susan M. Lusseau, and Piet Ruardij  
**Keywords:** North Sea, herring, dynamic energy budget, ecophysiology, habitat quality, ERSEM |
| B:05 | **Title:** Going pelagic: How abiotic conditions force demersal Baltic cod into open water, and how this affects assessment  
**Authors:** Matthias Schaber, Hans-Harald Hinrichsen, and Joachim Gröger  
**Keywords:** seasonal distribution patterns, hydroacoustic single-fish detection, |
| B:06 | **Title:** Acoustic assessment of the effect of anchovy on bluefin tuna school structure: implications for acoustic estimation of tuna abundance and of predation of anchovy  
**Authors:** Nicolas Goñi, Igor Arregui, Guillermo Boyra, and Haritz Arrizabalaga  
**Keywords:** acoustics, bluefin tuna, Bay of Biscay, feeding behaviour |
| B:07 | **Title:** Phytoplankton abundance and productivity impacts the distribution of herring in the North Sea  
**Authors:** Sven Gastauer, Mark Dickey-Collas, Narangerel Davaasuren, Niels Hintzen, Thomas Brunel, and Sascha Fässler  
**Keywords:** North Sea, herring, plankton, acoustics |
| B:08 | **Title:** Mesoscale eddies stimulate higher trophic level marine life – acoustically recorded density distribution creates understanding of the impact of physical forcing  
**Authors:** Olav Rune Godø, Gavin Macaulay, Annette Samuelsen, Solfrid Sætre Hjøllo, and Johnny Johannessen  
**Keywords:** Acoustics, satellite imaging, mesoscale eddies, physical-biological coupling, biomass distribution pattern |
| B:09 | **Withdrawn** |
| B:10 | **Title:** Assessing mackerel abundance indices extracted from opportunistically recorded acoustic data onboard a bottom trawl survey  
**Authors:** Jeroen van der Kooij, Sven Gastauer, Sascha M.M. Fässler, Beatriz O. Roel, and David Righton  
**Keywords:** North Sea, mackerel, feeding, fisheries acoustics, opportunistic |
| B:11 | **Title:** Acoustic mapping of deep water coral  
**Authors:** B. Ramiro Sanchez, F. McIntyre, F. Neat, and P. G. Fernandes  
**Keywords:** coral, acoustic, single split-beam echosounder |
| B:12 | **Title:** Acoustic data from fishing vessels: what indicators can be obtained that research vessels cannot provide?  
**Authors:** François Gerlotto, Mariano Gutierrez, Erwan Josse, Anibal Aliaga, Jeremie Habasque, and Arnaud Bertrand  
**Keywords:** fisheries acoustics, jack mackerel, fishing vessels, South Pacific Ocean |
| B:13 | **Title:** Assess spatial indicators from single species acoustics estimates for ecosystem based management: Some possibilities from the Eastern Mediterranean Sea  
**Authors:** M. Giannoulaki, A. Machias, P. Petitgas, M.M. Pirounaki, K. |
| B:14 | Title: Extraction of zooplankton echoes in mixed aggregations  
Authors: Rolf J. Korneliussen, Egil Ona, and Hector Pena  
Keywords: acoustics, zooplankton, mixed aggregations |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B:15</td>
<td>Withdrawn</td>
</tr>
</tbody>
</table>
| B:20 | Title: An acoustic survey designed to fit a new Area Based Sandeel Management  
Authors: Espen Johnsen, Tore Johannessen, Alf Harbitz, Egil Ona  
Keywords: Acoustic, Management model, North Sea, Sandeel |
| --- | --- |
| B:16 | Poster  
Title: Oceanographic and physiological conditioning of the hydroacoustic survey results in the Canary upwelling region  
Authors: A. Sorokin, N. Barkova, and N. Timoshenko  
Keywords: biomass, indices, availability for the survey, upwelling region, habitat conditions |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B:17</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>B:18</td>
<td>Withdrawn</td>
</tr>
</tbody>
</table>
| B:19 | Poster  
Title: Density dependence in spatial behaviour of anchovy and sardine across Mediterranean systems  
Authors: M. Giannoulaki et al.  
Keywords: spreading area index, anchovy, sardine, Mediterranean Sea |