

Theme Session on Multidisciplinary Approaches to the Identification of Stock Structure of Small Pelagics: Implications for Assessment and Sustainable Management (K)

Conveners: Emma Hatfield, UK and Doug Hay, Canada

Agenda and Order of the Day

Saturday 24 September 09.00–16.30 (Gordon A Room)

		Time
1.	Opening	09.00–
2.	Introduction Hatfield/Hay	–09.05
3.	Presentation of Papers	
<i>Code</i>	<i>Author(s) and title</i>	
K:21	<i>Keynote speaker: Robin S. Waples: Insights into stock structure of marine species: Opportunities and challenges</i>	09.05–09.35
K:06	<i>Keynote speaker: Lorenz Hauser, Gary R Carvalho, and Emma M.C. Hatfield: Big questions on small fish: Conceptual, methodological and analytical challenges in the population identification of pelagic species</i>	09.35–10.05
K:09	<i>Steven X. Cadrin, Kevin D. Friedland, Karen L. Bolles, William J. Overholtz, and Michael P. Armstrong: Using multidisciplinary stock identification to optimize morphometric discrimination of Atlantic herring spawning groups off New England</i>	10.05–10.20
K:14	<i>D.E. Hay and T. Beacham: Stock identification of eulachon (<i>Thaleichthys pacificus</i>), an anadromous smelt in the Pacific</i>	10.20–10.35
	Coffee break	10.35–11.00
K:01	<i>Emma M.C. Hatfield,, Alain F. Zuur, John Boyd, Neil Campbell, James C. Chubb, Catherine M. Collins, Jamie Coughlan, Marcus Cross, Tom F. Cross, Carey O. Cunningham, Audrey J. Geffen, Ken MacKenzie, Richard D.M. Nash, Soenke Jansen, Suzanne Kay, Ciarán J. Kelly, and David B. O’Le: WESTHER: A multidisciplinary approach to the identification of herring (<i>Clupea harengus</i> L.) stock components west of the British Isles using biological tags and genetic markers</i>	11.00–11.15
K:03	<i>Richard Gustafson: Multidisciplinary examination of Pacific herring (<i>Clupea pallasii</i>) population discreteness: the Cherry Point population and the USA’s Endangered Species Act</i>	11.15–11.30
K:22	<i>Tiit Raid, Georgs Kornilovs, and Heli Shpilev: Stock diversity of herring in the Northern Baltic: is the separate assessment of herring natural stock units possible?</i>	11.30–11.45
K:20	<i>Daniel E. Ruzzante, Stefano Mariani, Dorte Bekkevold, Carl Andre, Henrik Mosegaard, Lotte A. W. Clausen, Thomas G. Dahlgren, William F. Hutchinson, Emma M. C. Hatfield, Else Torstensen, Jennifer Brigham, E. John Simmonds, Linda Laikre, Lena C. Larsson, René J. M. Stet, Nils Ryman, Gary R. Carvalho: Mixed Stock Analysis in a migratory pelagic fish, Atlantic herring (<i>Clupea harengus</i>) in the North Sea and adjacent areas</i>	11.45–12.00

K:08	<i>Dorte Bekkevold, Stefano Mariani, Lotte A.W. Clausen, William F. Hutchinson, Emma M.C. Hatfield, Carl Andre, Gary R. Carvalho, Else Torstensen, Henrik Mosegaard, Thomas G. Dahlgren, E. John Simmonds, Jennifer Brigham, Linda Laikre, Lena C. Larsson, René J. M. Stet, Nils Ryman, and Daniel E. Ruzzante: Using genetic markers to determine Atlantic herring population structure in the North Sea–Baltic transition zone and to monitor mixed stock fisheries in the Skagerrak</i>	12.00–12.15
K:16	<i>Carl André, D. Bekkevold, S. Mariani, L. Laikre, L.A.W. Clausen, H. Mosegaard, T.G. Dahlgren, W.F. Hutchinson, J. Brigham, L.C. Larsson, K. Mudde, R.J.M. Stet, D.E. Ruzzante, G.R. Carvalho, and N. Ryman: Comparison of four different genetic markers for stock identification in Atlantic herring</i>	12.15–12.30
	Lunch break	12.30–13.30
K:18	<i>Deirdre Brophy, Stefano Mariani, Maria E. Mannarelli, Gary R. Carvalho, Pauline King, and Emma M.C. Hatfield: Complex population structure in juvenile Atlantic herring in Scottish west coast sea lochs: a multi-marker approach</i>	13.30–13.45
K:02	<i>Danielle Mitchell, Pat McAllister, Greg Bargmann, and Lorenz Hauser: Temporal changes in genetic population structure of Pacific herring (<i>Clupea pallasii</i>) in Puget Sound, Washington over three decades</i>	13.45–14.00
K:07	<i>R. Cimmaruta, P. Abaunza, and G. Nascetti: The horse mackerel stock assessment: the use of allozymes in a multidisciplinary approach to define stock boundaries and state</i>	14.00–14.15
K:17	<i>Ken MacKenzie, Pablo Abaunza, and Neil Campbell: The use of parasites as biological tags in multidisciplinary stock identification studies of small pelagic fish</i>	14.15–14.30
K:19	<i>S. Mattiucci, P. Abaunza, and G. Nascetti: Parasites of the genus <i>Anisakis</i> as “biological tags”: their genetic identification for horse mackerel stock definition in a multidisciplinary approach</i>	14.30–14.45
K:11	<i>Kym Jacobson, Rebecca Baldwin, and Robert Emmett: Parasites as biological tags for separating North Eastern Pacific sardine (<i>Sardinops sagax</i>) stocks</i>	14.45–15.00
K:12	<i>Mark Dickey-Collas, Cindy van Damme, and Lotte Worsøe Clausen: Within stock structure and TACs: an investigation into the spawning origin of North Sea herring using otolith microstructure and the dynamics of Downs herring</i>	15.00–15.15
K:13	<i>Noirin Burke, D. Brophy, and P. King: The use of otolith characteristics to trace juvenile origin in herring (<i>Clupea harengus</i>) populations</i>	15.15–15.30
K:05	<i>L.A.W Clausen, E. Hatfield, and H. Mosegaard: Application and validation of otolith microstructure as stock identifier in mixed Atlantic herring (<i>Clupea harengus</i>) stocks in the North Sea and Western Baltic</i>	15.30–15.45
K:10	<i>Julie Marcil, Douglas P. Swain, and Jeffrey A. Hutchings: Countergradient variation in body shape of Atlantic cod: implications for studies of stock structure</i>	15.45–16.00
K:15	<i>C.I. Zhang and D.E. Hay: Stock identification of small pelagics: a different perspective from the western Pacific</i>	16.00–16.15
	Wrap-up and discussion Hatfield/Hay	16.15–16.30

Posters

- K:23 *Maria Antsalo, Aril Slotte, Dankert Skagen, and Øyvind Ulltang: Abundance estimation of the western spawning stock component of the Northeast Atlantic Mackerel (*Scomber scombrus*) with the use of Norwegian tagging data*
- K:24 *N Campbell, C. Collins, M.A. Cross, J.C. Chubb, C.O. Cunningham, K. MacKenzie, and E.M.C. Hatfield: Sequencing the Cytochrome Oxidase I (COI) region of the parasitic nematode *Anisakis simplex* to identify spawning populations of herring, *Clupea harengus*, to the west of the British Isles*