

Theme Session E

Stocks in flux: From selection pressures via phenotypic and genetic adaptive responses to impacts on ecosystem services

Conveners: Ulf Dieckmann (IIASA), Mikko Heino (Norway), and Filip Volckaert (Belgium)

Agenda and Orders of the Day for:

Tuesday 16 September 2014, 17:30–19:30 – Arao
Wednesday 17 September 2014, 09:00–13:00 – Arao

- 1) Opening and introduction 17:30
- 2) Appointment of rapporteur
- 3) Presentation of papers

CM Code		Time
TUESDAY 16 SEPTEMBER 2014, 17:30–19:30 – Arao		
E: 01 Oral	Title: Understanding the causes of maturation shifts in gadoid populations Authors: Peter J. Wright, Stephen C.F. Palmer and Declan Tobin Keywords: Maturation; temperature effects; individual-based modelling; fisheries-induced evolution	17:40
E: 02 Oral	Title: How strong is fisheries-induced selection? An assessment of selection differentials caused by fishing Authors: Shuichi Matsumura, Mikko Heino, Bruno Ernande, Adriaan Rijnsdorp, Ulf Dieckmann, and the WGEVO participants Keywords: fisheries-induced evolution, fisheries management, growth, phenotypic plasticity, probabilistic maturation reaction norm, selection differential, reproductive investment	17:55
Poster presentations		
E: 03 Poster	Title: Population diversity and structure in <i>Lipophrys pholis</i> (Blenniidae, Teleostei) in Central Portugal, variation across a decade Authors: Sara Francisco and Joana I. Robalo Keywords: rock intertidal, population genetics, temporal variation	18:10
E: 04 Poster	Title: Inferring natal homing behavior in Atlantic mackerel (<i>Scomber scombrus</i> L.) through population genomics: implications for stock assessment Authors: Naiara Rodriguez-Ezpeleta, Paula Álvarez, Unai Cotano, and Xabier Irigoien Keywords: mackerel, population genomics, natal homing, stock assessment	18:12

E: 05 Poster	Title: Evidence of local adaptation in European anchovy (<i>Engraulis encrasicolus</i> , L) from the Bay of Biscay	18:14
	Authors: Iratxe Montes, Iratxe Zarraonaindia, Mikel Iriondo, Carmen Manzano, Darrell Conklin, Unai Cotano, W. Stewart Grant, Xabier Irigoien, and Andone Estonba	
	Keywords: SNP, population genetics, divergent selection, salinity, ecotypes, ecological speciation	
E: 06 Poster	Title: How strong is fisheries-induced selection? A general framework for estimating fisheries-induced selection differentials	18:16
	Authors: Mikko Heino, Bruno Ernande, Shuichi Matsumura, Adriaan Rijnsdorp, Ulf Dieckmann, and the WGEVO participants	
	Keywords: fisheries-induced evolution, fisheries management, growth, phenotypic plasticity, probabilistic maturation reaction norm, selection differential, reproductive investment	
E: 07 Poster	Title: Population structure of ling (<i>Molva molva</i>) in the Northeast Atlantic and its implications for stock assessments and management advice	18:18
	Authors: Enrique Blanco Gonzalez, Halvor Knutsen, Per Erik Jorde, Kevin Alan Glover, and Odd Aksel Bergstad	
	Keywords: population structure, microsatellite, fishery management, gadidae	
E: 08 Poster	Title: A genetic multi marker approach to estimate spatial and temporal structuring and Ne of albacore (<i>Thunnus alalunga</i>)	18:20
	Authors: Urtzi Laconcha, Haritz Arrizabalaga, and Andone Estonba	
	Keywords: albacore, single nuclear polymorphisms, stock delimitation, effective population size	
E: 09 Poster	Title: Genetic structure and population dynamics of wreckfish (<i>Polyprion americanus</i>) in the North Atlantic	18:22
	Authors: Alfonso Pita, Nedia R. Matusse and Pablo Presa	
	Keywords: wreckfish, <i>Polyprion americanus</i> , microsatellites, worldwide distribution	
E: 10 Poster	Title: Temporal variation of the pseudo-selective transcribed spacer ITS1-rDNA in the Atlantic hake population (<i>Merluccius merluccius</i>)	18:24
	Authors: Alfonso Pita, Montse Pérez, José Cuellar and Pablo Presa	
	Keywords: <i>Merluccius merluccius</i> , ITS1, molecular network, fishery evolution	
E: 11 Poster	Title: An evolutionary explanation of female-biased sexual size dimorphism in North Sea plaice, <i>Pleuronectes platessa</i> L.	18:26
	Authors: Fabian M. Molle, Katja Enberg, David S. Boukal, Adriaan D. Rijnsdorp, and Ulf Dieckmann	
	Keywords: life-history evolution, female-biased sexual size dimorphism, energy allocation, growth, maturation, reproductive investment	

E: 12 Poster	Title: A non-lethal approach identifies ontogenetic shifts in d15N signatures in fin rays of Goliath Grouper, <i>Epinephelus itajara</i>	18:28
	Authors: Orian Tzadik	
	Keywords: goliath grouper; ontogeny; isotope chronologies; trophic shifts	
E: 13	<i>Withdrawn</i>	
	Discussion	18:30

WEDNESDAY 17 SEPTEMBER 2014, 09:00–13:00 – Arao

E: 14 Oral	Title: Latitudinal variation in female sole (<i>Solea solea</i>) life-history strategy in the Northeast Atlantic	09:00
	Authors: Bruno Ernande, Fabian M. Mollet, Georg H. Engelhard, Anssi Vainikka, Ane T. Laugen, and Adriaan D. Rijnsdorp	
	Keywords: latitudinal gradient, thermal gradient, life-history, phenotypic plasticity, local adaptation, counter-gradient genetic variation, evolution, climate change	
E: 15 Oral	Title: A simulation approach to managing isolation-by-distance stock structure in marine fish, Pacific cod and blackspotted rockfish: Where do we draw the line?	09:15
	Authors: Ingrid Spies, Paul Spencer, and André E. Punt	
	Keywords: Fisheries management, isolation-by-distance, ecosystem services	
E: 16 Oral	Title: Lack of parallelism between the phenotypic drift of overexploited fisheries and their neutral genetic variation	09:30
	Authors: J. Cuéllar-Pinzón and P. Presa	
	Keywords: overexploited fisheries, phenotypic drift, genetic erosion	
E: 17 Oral	Title: The evolutionary effect of fishing pressure on <i>Sardinella aurita</i> population's spatial distribution off North-West Africa investigated with an individual based biophysical model	09:45
	Authors: Timothée Brochier, Pierre-Amaël Auger, Laure Pecquerie, Eric Machu, Baye Cheikh Mbaye, Modou Thiaw, and Patrice Brehmer	
	Keywords: fisheries-induced evolution, North-West African Upwelling System, small pelagic fish, <i>Sardinella aurita</i> , fish migration	
BREAK		
E: 18 Oral	Title: Behavioural differences between experimental populations of guppies (<i>Poecilia reticulata</i>) that experienced size-selective fishing	10:30
	Authors: Beatriz Diaz Pauli, Anne Christine Utne-Palm, Joan Sala, Martin Wiech, and Mikko Heino	
	Keywords: size-selective fishing, behaviour, mating, boldness, experiment, <i>Poecilia reticulata</i>	
E: 19 Oral	Title: Evolutionary and ecological consequences of fisheries-induced selection of behavioural types	10:45
	Authors: Lise Marty and Ken H. Andersen	
	Keywords: Behaviour, selectivity, fisheries-induced evolution	

E: 20 Oral	Title: Changes in age and size at maturation of Northeast Arctic cod are driven by the interplay between environmentally-induced phenotypic plasticity and fisheries-induced selection	11:00
	Authors: Mikko Heino, Olav Rune Godø, and Ulf Dieckmann	
	Keywords: cod, density-dependent growth, fisheries-induced evolution, fisheries management, phenotypic plasticity, probabilistic maturation reaction norm	
E: 21 Oral	Title: Phenotypic and genetic changes in life history traits in experimental populations of guppies (<i>Poecilia reticulata</i>) that experienced size-selective fishing	11:15
	Authors: Beatriz Diaz Pauli, Heikki Savolainen, Anne Christine Utne-Palm, Diep Mach Ellertsen, David Reznick, and Mikko Heino	
	Keywords: size-selective fishing, maturation schedule, phenotypic change, genetic change, experiment, <i>Poecilia reticulata</i>	
E: 22 Oral	Title: Influence of gear selectivity on maturation evolution and yield	11:30
	Authors: Fabian Zimmermann and Christian Jørgensen	
	Keywords: fisheries management, fishing-induced evolution, size-selective fishing, gear selectivity	
E: 23 Oral	Title: Evolutionary impact assessment of the North Sea plaice fishery	11:45
	Authors: Fabian M. Mollet, Jan Jaap Poos, Ulf Dieckmann, and Adriaan D. Rijnsdorp	
	Keywords: n.a.	
E: 24 Oral	Title: Economic repercussions of fisheries-induced evolution	12:00
	Authors: Anne Maria Eikeset, Andries Richter, Erin S. Dunlop, Ulf Dieckmann, and Nils Chr. Stenseth	
	Keywords: Atlantic cod, genetic adaptations, harvest control rule, marine governance, adaptive management	
E: 25 Oral	Title: Molecular genetic evidence for fisheries-induced evolution in the North Sea stock of sole	12:15
	Authors: Eveline Diopere, Gregory E. Maes, Bruno Ernande, Bart Hellemans, Fabian Mollet, Adriaan D. Rijnsdorp, and Filip A.M. Volckaert	
	Keywords: evolution, fisheries, genomics, quantitative genetics, sole	
E: 26 Oral	Title: Fisheries-induced neutral and adaptive evolution and consequences for adaptive potential	12:30
	Authors: Lise Marty, Ulf Dieckmann, and Bruno Ernande	
	Keywords: fisheries-induced evolution, life-history traits, eco-genetic model, genetic drift, selection, genetic markers, effective population size, genetic erosion	
	Closing Discussion	12:45
	End of session	13:00