Jonna Tomkiewicz - DTU Orbit (15/01/2018)

Jonna Tomkiewicz
Senior Researcher
National Institute of Aquatic Resources
Section for Marine Living Resources

Postal address:
Kemitorvet
202, 6118
2800
Kgs. Lyngby
Denmark
Email: jt@aqua.dtu.dk
Phone: 35883408
Mobile: 40210356

Publications:

Changes in reproductive life history and resource allocation impacting population dynamics of Baltic cod
Publication: Research › Conference abstract for conference – Annual report year: 2017

Eastern Baltic cod recruitment revisited—dynamics and impacting factors
Publication: Research - peer-review › Review – Annual report year: 2016

Female nutrition and assisted reproduction in European eel: influences on oogenesis and egg quality
Publication: Research › Ph.D. thesis – Annual report year: 2017

Temperature effects on gene expression and morphological development of European eel, Anguilla anguilla larvae
Publication: Research - peer-review › Journal article – Annual report year: 2017

Temperature induced variation in gene expression of thyroid hormone receptors and deiodinases of European eel (Anguilla anguilla) larvae
Publication: Research - peer-review › Journal article – Annual report year: 2017

Abundance of specific mRNA transcripts impacts hatching success in European eel, Anguilla anguilla L
Publication: Research - peer-review › Journal article – Annual report year: 2015

Baltic cod recruitment – the impact of changing environmental conditions
Publication: Research › Paper – Annual report year: 2016

Development of a broodstock diet to improve developmental competence of embryos in European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2015

Ecosystem indicators in the context of fisheries management: example of cod in the Baltic Sea
Publication: Research › Conference abstract for conference – Annual report year: 2016

Effects of salinity and sea salt type on egg activation, fertilization, buoyancy and early embryology of European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2015

First-feeding by European eel larvae: A step towards closing the life cycle in captivity
Publication: Research - peer-review › Journal article – Annual report year: 2016
First production of larvae using cryopreserved sperm: Effects of preservation temperature and cryopreservation on European eel sperm fertilization capacity
Publication: Research - peer-review › Journal article – Annual report year: 2016

Functional characterisation of eel dopamine D2 receptors and involvement in the direct inhibition of pituitary gonadotrophins
Publication: Research - peer-review › Journal article – Annual report year: 2016

Interactive effects of dietary composition and hormonal treatment on reproductive development of cultured female European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2016

Langt fremme med produktion af åleyngel i Hirtshals
Publication: Communication › Journal article – Annual report year: 2016

Ontogeny and growth of early life stages of captive-bred European eel
Publication: Research - peer-review › Journal article – Annual report year: 2016

Publication: Research › Report – Annual report year: 2016

Three nuclear and two membrane estrogen receptors in basal teleosts, Anguilla sp.: Identification, evolutionary history and differential expression regulation
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ultrasonographic predictors of response of European eels (Anguilla anguilla) to hormonal treatment for induction of ovarian development
Publication: Research - peer-review › Journal article – Annual report year: 2016

Duplicated leptin receptors in two species of eel bring new insights into the evolution of the leptin system in vertebrates
Publication: Research - peer-review › Journal article – Annual report year: 2015

Fecundity regulation, maturation progression and spawning fidelity in relation to size, condition and age of Baltic herring (Clupea harengus L.)
Publication: Research › Conference abstract for conference – Annual report year: 2015

Female ovarian abnormalities and reproductive failure of autumn-spawning herring (Clupea harengus membras) in the Baltic Sea
Publication: Research - peer-review › Journal article – Annual report year: 2015

Impact of dietary fatty acids on muscle composition, liver lipids, milt composition and sperm performance in European eel
Publication: Research - peer-review › Journal article – Annual report year: 2015

Light impacts embryonic and early larval development of the European eel, Anguilla anguilla
Publication: Research › Conference abstract for conference – Annual report year: 2015

Musculoskeletal anatomy and feeding performance of pre-feeding engyodontic larvae of the European eel (Anguilla anguilla)
Publication: Research - peer-review › Journal article – Annual report year: 2015

Ontogeny of the immune response during early life history of European eel and its temperature dependence
Publication: Research › Poster – Annual report year: 2015
Thermal effects on early life history stages of European eel Anguilla anguilla
Publication: Research › Conference abstract for conference – Annual report year: 2015

Eels in culture, fisheries and science in Denmark
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Effects of dietary fatty acids on the production and quality of eggs and larvae of Atlantic cod (Gadus morhua L.)
Publication: Research - peer-review › Journal article – Annual report year: 2014

European eel as experimental model I: Assisted reproduction technology and standardized fertilization methods for mass production of viable embryos and larvae
Publication: Research › Conference abstract for conference – Annual report year: 2014

Ichthyodinium identified in the eggs of European eel (Anguilla anguilla) spawned in captivity
Publication: Research - peer-review › Journal article – Annual report year: 2014

Kunstig befrugtning og babyboom i ålens verden
Publication: Research › Conference abstract for conference – Annual report year: 2014

Larval production and survival during the early larval stage in European eel
Publication: Research › Paper – Annual report year: 2014

Light impacts embryonic and early larval development of the European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2014

Microbial interference and potential control in culture of European eel (Anguilla anguilla) embryos and larvae
Publication: Research - peer-review › Journal article – Annual report year: 2014

Muscle development in European eel Anguilla anguilla yolksac larvae and effects of egg incubation temperature
Publication: Research › Paper – Annual report year: 2014

On the way to successful European eel larval rearing: Impact of biophysical conditions and gamete quality
Publication: Research › Ph.D. thesis – Annual report year: 2014

Standardization of fertilization protocols for the European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2014

A review on broodstock nutrition of marine pelagic spawners: the curious case of the freshwater eels (Anguilla spp.)
Publication: Research - peer-review › Journal article – Annual report year: 2013

Biochemical, histological and molecular study of digestive tract development in European eel larvae (Anguilla anguilla) prior to exogenous feeding
Publication: Research › Poster – Annual report year: 2014

Comparison of broodstock lipid stores in farmed and wild European eel (Anguilla anguilla) in link with reproductive performance
Publication: Research › Poster – Annual report year: 2014

Development of a broodstock diet to improve embryonic development competence in female European eel Anguilla anguilla
Publication: Research › Paper – Annual report year: 2014
Development of techniques and technology for embryonic and larval rearing of the European eel
Publication: Research › Poster – Annual report year: 2014

Effect of preservation temperature and cryopreservation on European eel sperm fertilization capacity. First production of larvae using cryopreserved sperm
Publication: Research › Poster – Annual report year: 2014

Evaluation of methods to determine sperm density for the European eel, Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2013

Evaluation of methods to determine sperm density for the European eel, Anguilla anguilla
Publication: Research › Poster – Annual report year: 2014

Forage fish quality: seasonal lipid dynamics of herring (Clupea harengus L.) and sprat (Sprattus sprattus L.) in the Baltic Sea
Publication: Research - peer-review › Journal article – Annual report year: 2013

Individual behaviour of Baltic cod (Gadus morhua) in relation to sex and reproductive state
Publication: Research - peer-review › Journal article – Annual report year: 2013

Linking size and age at sexual maturation to body growth, productivity and recruitment of Atlantic cod stocks spanning the North Atlantic
Publication: Research - peer-review › Journal article – Annual report year: 2012

Microbial interference and potential control in the production of European eel Anguilla anguilla larvae
Publication: Research › Conference abstract for conference – Annual report year: 2013

Microbial interference with hatch and survival of European eel larvae
Publication: Research › Conference abstract for conference – Annual report year: 2013

Modification of essential fatty acid composition in broodstock of cultured European eel Anguilla anguilla L.
Publication: Research - peer-review › Journal article – Annual report year: 2012

Oogenesis, fecundity and condition of Baltic herring (Clupea harengus L.): A stereological study
Publication: Research - peer-review › Journal article – Annual report year: 2013

Reproduction of European eel and larval culture: state of the art
Publication: Research › Paper – Annual report year: 2014

Spawning migration and behavior of Baltic cod (Gadus morhua) based on DST-derived individual information
Publication: Research › Poster – Annual report year: 2013

Stereology as a tool to assess reproduction strategy and fecundity of teleost fishes: Integrated studies in Central Baltic herring (Clupea harengus L.)
Publication: Research › Ph.D. thesis – Annual report year: 2014

Techniques for rearing European eel during early life history
Publication: Research › Paper – Annual report year: 2014

Linking lipid dynamics with the reproductive cycle in Baltic cod Gadus morhua
Publication: Research - peer-review › Journal article – Annual report year: 2012
Lipid dynamics of herring (Clupea harengus L.) and sprat (Sprattus sprattus) as major prey species in the Baltic Sea
Publication: Research › Conference abstract for conference – Annual report year: 2013

Multiple kisspeptin receptors in early Osteichthyans provide new insights into the evolution of this receptor family
Publication: Research - peer-review › Journal article – Annual report year: 2012

Reproduction of European Eel in Aquaculture (REEL): Consolidation and new production methods
Publication: Research › Report – Annual report year: 2012

Reproduction of European eel: towards a self-sustained aquaculture (PRO-EEL)
Publication: Research › Conference abstract for conference – Annual report year: 2012

Robustness of egg production methods as a fishery independent alternative to assess the Eastern Baltic cod stock (Gadus morhua callarias L.)
Publication: Research - peer-review › Journal article – Annual report year: 2011

Assessment of testis development during induced spermatogenesis in the European eel Anguilla anguilla
Publication: Research - peer-review › Journal article – Annual report year: 2011

Cut & count - stereology as a tool to understand fish biology
Publication: Research › Poster – Annual report year: 2011

Emerging issues and methodological advances in fisheries reproductive biology
Publication: Research - peer-review › Journal article – Annual report year: 2011

Gonadal maturation of herring (Clupea harengus L.) assessed by histological and macroscopic characteristics
Publication: Research › Poster – Annual report year: 2011

Linking size and age of attaining sexual maturation to growth and stock productivity in Atlantic cod stocks
Publication: Research › Conference abstract for conference – Annual report year: 2011

Oocyte recruitment dynamics and fecundity regulation in Baltic Sea herring (Clupea harengus L.)
Publication: Research › Conference abstract for conference – Annual report year: 2011

Quantification of oocytes using design-based stereology
Publication: Research › Poster – Annual report year: 2011

Skipped spawning in fishes: More common than you might think
Publication: Research - peer-review › Journal article – Annual report year: 2011

Spatial and interannual variability in Baltic sprat batch fecundity
Publication: Research - peer-review › Journal article – Annual report year: 2011

Enhancing European eel culture
Publication: Research › Journal article – Annual report year: 2010

European eel and aquaculture
Publication: Research › Report – Annual report year: 2010
Influence of lipids and fatty acid composition on Baltic cod (Gadus morhua L.) maturation and timing of spawning
Publication: Research › Conference abstract for conference – Annual report year: 2010

Seasonal lipid dynamics of sprat (Sprattus sprattus) and herring (Clupea harengus) in the Baltic Sea
Publication: Research › Poster – Annual report year: 2010

Determination of fish gender using fractal analysis of ultrasound images
Publication: Research - peer-review › Journal article – Annual report year: 2009

Development of a manual to determine gonadal maturity of herring (Clupea harengus L.)
Publication: Research › Poster – Annual report year: 2009

Dioxin og biologisk effektmonitoring i ålekvabbe i kystnære danske farvande
Publication: Research › Report – Annual report year: 2009

Estimating oocyte numbers in the ovaries of teleost fish
Publication: Research › Poster – Annual report year: 2009

Genetic population structure of European sprat (Sprattus sprattus L.): differentiation across a steep environmental gradient in a small pelagic fish
Publication: Research - peer-review › Journal article – Annual report year: 2009

Optimization of fatty acid composition in the diet for female broodstock eels
Publication: Research › Conference abstract for conference – Annual report year: 2009

Produktion af torskelarver til udsætning i den østlige Østersø – RESTOCK
Publication: Research › Conference abstract in proceedings – Annual report year: 2009

Seasonal lipid dynamics of herring and sprat in the Baltic Sea and possible implications for cod reproduction
Publication: Research › Poster – Annual report year: 2009

Spatial and temporal variation in Baltic sprat (Sprattus sprattus balticus S.) batch fecundity
Publication: Research › Poster – Annual report year: 2009

Stereology as a tool to assess reproduction strategy and fecundity of teleost fishes
Publication: Research › Conference abstract in proceedings – Annual report year: 2009

The evaluation of reference points and stock productivity in the context of alternative indices of stock reproductive potential
Publication: Research - peer-review › Journal article – Annual report year: 2009

Characteristics of semen during induced spermatogenesis in European eel Anguilla anguilla
Publication: Research › Poster – Annual report year: 2008

Kunstig reproduktion af ål: Roe II og IIIB
Publication: Research › Report – Annual report year: 2008

Manual to determine gonadal maturity of Baltic herring
Publication: Research › Report – Annual report year: 2008

Rationale for restocking the Eastern Baltic cod stock
Publication: Research - peer-review › Journal article – Annual report year: 2008
Sådan ændres produktionsål til moderfisk
Publication: Research › Conference abstract for conference – Annual report year: 2008

Seasonal prevalence and intensity of follicular atresia in Baltic cod Gadus morhua callarias L
Publication: Research - peer-review › Journal article – Annual report year: 2008

Successful production of viable eggs and larvae of european eel (anguilla anguilla)
Publication: Research › Conference abstract for conference – Annual report year: 2008

3D-mapping of fish habitats in design of dynamic fishing closures
Publication: Research › Poster – Annual report year: 2007

3D-mapping of fish habitats in design of dynamic fishing closures
Publication: Research › Poster – Annual report year: 2007

Pelagic habitat mapping: A tool for area-based fisheries management in the Baltic Sea
Publication: Research › Report – Annual report year: 2007

Report of the Workshop on Sexual Maturity Staging of Cod, Whiting, Haddock and Saithe (WKMSCWHS)
Publication: Research › Article in proceedings – Annual report year: 2007

Successful production of European eel larvae
Publication: Research › Conference abstract for conference – Annual report year: 2007

Baltic
Publication: Research › Book chapter – Annual report year: 2005

Baltic cod recruitment - the impact of climate variability on key processes
Publication: Research - peer-review › Journal article – Annual report year: 2005

Hvornår er en fisk moden og gydeklar?
Publication: Research › Journal article – Annual report year: 2005

The potential for enhancing the cod stock in the Eastern Baltic
Publication: Research › Conference article – Annual report year: 2005

Timing of Baltic cod spawning and spawner demography
Publication: Research › Conference article – Annual report year: 2005

Baltic cod recruitment - the role of physical forcing and species interactions
Publication: Research › Conference article – Annual report year: 2004

En hjælpende hånd til torsk i Østersøen
Publication: Research › Journal article – Annual report year: 2004

Available information for estimating reproductive potential of Northwest Atlantic groundfish stocks
Publication: Research - peer-review › Journal article – Annual report year: 2003

Developing alternative indices of reproductive potential for use in fisheries management : Case studies for stocks spanning an information gradient
Fish stock development in the Central Baltic Sea (1976-2000) in relation to variability in the environment

Micro- and macroscopic characteristics to stage gonadal maturation of female Baltic cod

Recruitment of Baltic cod and sprat stocks: identification of critical life stages and incorporation of environmental variability into stock-recruitment relationships

The availability of data for estimating reproductive potential for selected stocks in the North Atlantic

Egg production of Baltic cod in relation to variable sex ratio, maturity and fecundity

Manual to determine gonadal maturity of Baltic cod

Developing Baltic cod recruitment models II: Incorporation of environmental variability and species interaction

A robust method for compiling trawl survey data used in the assessment of central Baltic cod (Gadus morhua L.)

Recruitment of Baltic cod and sprat stocks: identification of critical life stages and incorporation of environmental variability and spatial heterogeneity into stock-recruitment relationships

Baltic cod reproduction in the Gotland Basin: annual variability and possible causes

Histological evaluation of gonadal and sexual maturity in female Baltic cod (Gadus morhua): Preliminary results

Stock-recruitment relationships of Baltic cod incorporating environmental variability and spatial heterogeneity

A robust way of compiling trawl survey data for the use in the Central Baltic cod stock

Oceanographic influences on the distribution of Baltic cod, Gadus morhua, during spawning in the Bornholm Basin of the Baltic Sea

Quantifying and disaggregating the spawner effect: Incorporating stock structure, spatial distribution and female influences into estimates of annual population egg production
Maturity ogives and sex ratios for Baltic cod: establishment of a database and time series
Publication: Research › Conference article – Annual report year: 1997

Baltic cod recruitment project (CORE)
Publication: Research › Conference article – Annual report year: 1996

Influence of salinity, oxygen and temperature on spawning aggregation and spatial distribution of Baltic cod (Gadus morhua L.)
Publication: Research › Conference article – Annual report year: 1996

Age composition, sex ratio and biomass of the Baltic cod spawning stock in the Bornholm Basin: Results of a pilot study
Publication: Research › Conference article – Annual report year: 1995

Baltic cod recruitment project
Publication: Research › Conference article – Annual report year: 1995

Preliminary observations of a size at settling and food resource utilization of juvenile (O-group) Baltic cod (Gadus morhua)
Publication: Research › Conference article – Annual report year: 1995

Projects:

Reproductive Physiology of Female European Eel
Project: PhD

Eastern Baltic cod - New knowledge of growth and mortality is the way to improved management advice (39366)
Project

Egg quality and Offspring Performance in European Eel
Project: PhD

BONUS BIO-C3 Cruise (39117-DCH)
Project

Eel hatchery technology for a sustainable aquaculture (EEL-HATCH) (39181)
Project

European eel larval ontogeny and physiology
Project: PhD

Biodiversity changes - causes, consequences and management implications (BIO-C3) (39117)
Project

Reproduction capacity of European eel in captivity: Fecundity, follicular maturation and developmental competence of embryos and larvae
Project: PhD

Assessing and improving the quality of aquatic animal gametes to enhance aquatic resources – The need to harmonize and standardize evolving methodologies and improve transfer from academia to industry (AQUAGAMETE) (39130)
Project

Reproduction of European eel: Towards a self-sustained aquaculture (PRO-EEL) (38793)
Project
Eel Egg and Larval development in Relation to Bio-Physical Characteristics and Gamete Quality
Project: PhD

Reproduction of European eel in aquaculture: Consolidation and new production methods (REEL) (38398)
Project

Reproductive Ecology: Effect of dietary fatty acids on ovarian maturation, spawning time and quality of eggs and larvae in Eastern Baltic cod
Project: PhD

Stereology as a tool to assess reproduction strategy and fecundity of teleost fishes
Project: PhD

Edible-, slaughter- and health quality of exercised rainbow trout (38395)
Project

Artificial reproduction of eels: Phase III (ROE III) (38187)
Project

Understanding the mechanisms of stock recovery (UNCOVER) (38104)
Project

Baltic Sea management: Nature conservation and sustainable development of the ecosystem through spatial planning (BALANCE) (38432)
Project

RESTOCK (38566) (38400 pre-project)
Project

Critical interactions between species and their implications for a precautionary fisheries management in a variable environment – a modeling approach (BECAUSE) (38613)
Project

Activities:

ICES - Workshop for maturity staging chairs - WKMATCH (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Workshop on Sexual Maturity Staging of Cod, Whiting, Haddock, Saithe and Hake - WKMSGAD (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar