Virtual International Symposium on Baltic Pike

November 23rd, 25th and 26th 2021
9 am – 1 pm CET · online

Organizers:
Robert Arlinghaus, Integrative Fisheries Management, Leibniz Institute of Freshwater Ecology and Inland Fisheries · **Ulf Bergström**, Department of Aquatic Resources, Swedish University of Agricultural Sciences · **Petter Tibblin**, Department of Biology and Environmental Science, Linnaeus University

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This virtual symposium aims to gather scientists, stakeholders, and the public with interest in the biology, ecology, evolution, exploitation and management of Northern pike (*Esox lucius*) in Baltic Sea. Pike is a freshwater piscivore that has colonized coastal areas in the Baltic Sea, developing a wide variation in life histories, such as anadromous and coastal resident lifestyles. The species is a highly regarded target for both commercial and recreational fisheries. Pike populations have seen declines in many areas of the Baltic Sea. Various explanations have been put forward, including environmental change, overharvest or predation by mesopredators, such as stickleback, or from top predators, such as seals However, lack of standardized monitoring limits our ability to precisely track the developments of pike populations in the Baltic. This symposium aims to present the latest research on Baltic Sea pike with a primary aim to examine communalities and differences in pressures on pike in different coastlines along the salinity gradients along the Baltic Sea. Another goal is to build an informal network among researchers interested in further developing the knowledge base for sustainable management of this iconic fish.

The symposia will be held online and allow for a maximum of 500 participants. Registration deadline: 17:00 (CET), November 19. Please state affiliation, email and if invited as speaker. Link to online meeting will be emailed on Nov 22.

https://lnu.se/en/meet-linnaeus-university/conferences/virtual-international-symposium-on-baltic-pike/

Tuesday, November 23rd 2021

08:45 – 09:00 Registration / Zoom link is open

09:00 – 09:15 Introduction and Welcome

REVIEWS

09:15 – 09:35 ***Temporal and spatial trends in coastal pike populations – a pan-Baltic assessment of available monitoring data***
Jens Olsson | Swedish University of Agricultural Sciences, Sweden

09:35 – 09:55 ***Brackish pike in Denmark: Status and ongoing experiments***
Christian Skov | National Institute of Aquatic Resources, Technical University of Denmark (DTU Aqua), Denmark

09:55 – 10:15 ***A review of the lagoon pike fishery in the southern Baltic Sea, Germany***
Robert Arlinghaus | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

10:15 – 10:35 ***Long-term changes in the abundance of large pike in the northern Baltic Sea – patterns and potential drivers***
Ulf Bergström | Swedish University of Agricultural Sciences, Sweden

10:35 – 10:50 BREAK (15 min.)

ECOLOGY

10:50 – 11:10 ***Variation in habitat utilisation of Baltic pike: is it associated to growth rate, reproductive investment, and morphology?***
Henrik Flink | Linnaeus University, Sweden

11:10 – 11:30 ***Importance of reed abundance and configuration on coastal pike population***
Örjan Östman | Swedish University of Agricultural Sciences, Sweden

11:30 – 11:50 ***Battling the stickleback wave: does pike and perch habitat connectivity provide resistance against an ongoing shift towards stickleback dominance?***
Agnes Olin | Stockholm University, Sweden

11:50 – 12:00 BREAK (10 min.)

12:00 – 12:20 ***Do olfactory cues inform sticklebacks on whether pike is predator or prey?***
Jasper Münnich | Linnaeus University, Sweden

12:20 – 12:40 ***Development of pike populations along the Swedish coast, and potential effects of grey seal predation***
Ulf Bergström | Swedish University of Agricultural Sciences, Sweden

12:40 – 13:00 ***Warmer water increases early body growth of northern pike (Esox lucius) but mortality has larger impact on decreasing body sizes***
Örjan Östman | Swedish University of Agricultural Sciences, Sweden

13:00 – 13:10 Concluding remarks

Thursday, November 25th 2021

08:45 – 09:00 Registration / Zoom link is open

09:00 – 09:05 Welcome back

MONITORING AND TRENDS

09:05 – 09:25 ***Using catch-only models to assess the status of the data-poor Baltic pike stock around the German island of Rügen***
Rob van Gemert | Swedish University of Agricultural Sciences, Sweden

09:25 – 09:45 ***A length-based stock assessment of the pike stock in the southern Baltic Sea of Germany - Status and possible drivers***
Jan Droll | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

09:45 – 10:05 ***The applicability of eDNA for monitoring pike abundance***
Erik Karlsson | Swedish University of Agricultural Sciences, Sweden

10:05 – 10:10 BREAK (5 min.)

10:10 – 10:30 ***Using on-site cameras to estimate recreational pike fishing effort***
Stefan Larsson | Swedish University of Agricultural Sciences, Sweden

10:30 – 10:50 ***Taking responsibility for resource use – a collaborative development of an app for recreational fisheries data collection***
Göran Sundblad | Swedish University of Agricultural Sciences, Sweden

10:50 – 11:10 ***Age corroboration in Baltic pike and possible consequences of aging bias for estimation of growth rate***
Timo Rittweg | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

11:10 – 11:20 BREAK (10 min.)

REPRODUCTION AND SPAWNING

11:20 – 11:40 ***The more sheltered, the better – Coastal bays and lagoons are important reproduction habitats for pike in the northern Baltic Sea***
Annie Pursiainen | Natural Resources Institute Finland (Luke), Finland

11:40 – 12:00 ***Anadromy of pike around the german island of Rügen***
Phillip Roser | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

12:00 – 12:20	***Telemetry studies on anadromous migrations of Baltic Sea pike in Väinameri Sea, Estonia*** Mehlis Rohtla |University of Tartu (UT), Estonia
12:20 – 12:25	BREAK (5 min.)
12:25 – 12:45	***Anadromous pike: How motivated are they to reach their spawning site?*** Félicie Dhellemmes | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany
12:45 – 01:05	***Using otolith microchemical analysis to investigate the relative importance of marine and freshwater spawning for pike (Esox lucius Linnaeus, 1758) in Estonia*** Roland Svirgsden| University of Tartu (UT), Estonia
01:05 – 01:15	Concluding remarks

Friday, November 26th 2021

08:45 – 09:00 Registration / Zoom link is open

09:00 – 09:05 Welcome back

GENETIC POPULATION STRUCTURE

09:05 – 09:25 ***Drivers of neutral and adaptive differentiation in pike (Esox lucius) populations from contrasting environments***
Johanna Sunde | Linnaeus University, Sweden

09:25 – 09:45 ***Fine-scale genetic structure of Baltic Sea pike***
Lovisa Wennerström | Swedish University of Agricultural Sciences, Sweden

09:45 – 10:05 ***Genetic population structure of Rügen pike based on pooled sequencing***
Arne Nolte | University of Oldenburg, Germany

10:05 – 10:25 ***Genetic relations between coastal populations of the Northern pike Esox lucius L. in the southern Baltic area***
Anna Wąs-Barcz | National Marine Fisheries Research Institute (NMFRI), Poland

10:25 – 10:30 BREAK (5 min.)

HUMAN DIMENSIONS

10:30 – 10:50 ***Risk and ambiguity in recreational fishing: An assessment using choice experiments with coastal anglers***
Dieter Kömle | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

10:50 – 11:10 ***Conflicts among stakeholder in the Rügen pike fishery***
Robert Arlinghaus | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

11:10 – 11:30 ***Public relations, stakeholder involvement and conflict management – an experience report***
Dominique Niessner | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

11:30 – 11:40 BREAK (10 min.)

MANAGEMENT

11:40 – 12:00 ***Effects of seasonal fishery closures on shallow coastal fish assemblages and food webs***
Johan Eklöf | Stockholm University, Sweden

12:00 – 12:20 ***Using size limits to manage pike – does saving large pike pay off?***
Robert Arlinghaus | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany

12:20 – 12:40	***PIKE project – how to bring Baltic pike back to Polish coastal waters?*** Dariusz P. Fey | National Marine Fisheries Research Institute (NMFRI), Poland
12:40 – 01:00	***Restored wetlands increase the abundances of adult pike in the coastal Baltic Sea*** Kristofer Bergström | Linnaeus University, Sweden
01:00 – 01:20	***Managing Baltic pikes – A participatory modelling approach as a decision tool for future harvest regulations*** Elias Ehrlich | Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany
01:20	Concluding remarks