Jun 24th, 10:50 AM - 12:50 PM

Concurrent Sessions B7: FITFISH: Current Information Needs for Effective Fish Passage Management

Leo Nagelkerke
LEI Wageningen UR

Jóhannes Sturlaugsson

Follow this and additional works at: https://scholarworks.umass.edu/fishpassage_conference

Part of the Aquaculture and Fisheries Commons, and the Hydraulic Engineering Commons

Nagelkerke, Leo and Sturlaugsson, Jóhannes, "Concurrent Sessions B7: FITFISH: Current Information Needs for Effective Fish Passage Management" (2015). International Conference on Engineering and Ecohydrology for Fish Passage. 79.
https://scholarworks.umass.edu/fishpassage_conference/2015/June24/79

This Event is brought to you for free and open access by the Fish Passage Community at UMass Amherst at ScholarWorks@UMass Amherst. It has been accepted for inclusion in International Conference on Engineering and Ecohydrology for Fish Passage by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
COST Action FA1304 FITFISH

Current information needs for effective fish passage management: prioritization and recent developments

Leo Nagelkerke
Jóhannes Sturlaugsson
Rationale of WG 2

- The strong **human influence** on many water bodies in Europe has had **detrimental effects** on populations of **migratory fish** species.

- **Measures to restore** migration have, until now, a strong **case-study** character.

- Need for a profound, **integrative scientific approach**, leading to a framework for analysing migration and the design of effective measures.

- Existing **knowledge** is often **scattered**, or **poorly accessible**, because it is not published as scientific peer-reviewed papers.
Aim of WG 2

Exchange and integrate knowledge among scientists and experts involved in the field and to develop a research agenda aimed at generating new knowledge in the fields of:

1. monitoring fish behaviour in real-life situations, using a range of well-known and high-tech techniques;

2. experimental approaches in which the effect of disturbing cues on behaviour and physiology of individual fishes is investigated;

3. modelling the effects of mitigating measures on population dynamics.
Countries involved

21 countries (24 June 2015)
Number of publications 2010-2015: “Fish migration” Scopus

n=1453
Environment

Physiology

Behaviour

Life history

Physiology

Individual

Population
Individual variation in migratory behaviour
Connectivity vs. invasions: round goby
Some questions (a very biased selection)

- How large are migration differences between conspecific individuals, and what causes them?
- How do barriers and mitigation measures affect individuals with different migratory traits?
- Do barriers and mitigation measures lead to human-induced selection and does this lead to population-genetic changes?
- How do we deal with the connectivity-invasion controversy?
- How can the effectiveness of migration mitigation measures be tuned to functional traits of fish species?
FITFISH Workshop: 13:30-17:30

- Evaluation of existing fish migration data, monitoring methodology for tracking migrant fish and bypass design, and the use of expertise within the platform to identify potential improvements
- The use of the established research network to search for collaborative project opportunities
- Transfer of knowledge between scientists, industry and policy makers

Venue: Oude Boteringstraat 18: assemble at the registration desk at 13:00