



CALL FOR PAPERS

From Headwater to Headland

Improving smolt survival in rivers and estuaries

The conference will be held at the Guild Hall, Berwick-Upon-Tweed
on Tuesday, 14th and Wednesday, 15th March 2017



This Conference is being jointly organised by :

The Atlantic Salmon Trust and The Tweed Foundation

<http://www.atlanticsalmontrust.org/>

<http://www.tweedfoundation.org.uk/>

This is the first call for papers for this Conference

There is general agreement that a key objective of salmon management should be to maximise the production of healthy wild salmon smolts. This event will explore what this means in practice, reviewing the current state of scientific knowledge about salmon smolts and considering the implications of this for the management of salmon, both in freshwater and in estuaries and coastal waters. It will also seek to identify those areas where managers and others need to know more if they are to increase smolt numbers.

Issues to be discussed will include:

- **The impact of predation in freshwater on smolt numbers**
How best can we assess the impact of different predators (birds, fish and mammals) on smolts, and how do different physical factors affect these?
To what extent do physical factors within rivers (barriers, channel straightening, reduced flows etc.) increase predation levels, and how can these be altered to reduce predation?
How practical, and effective, is action against predators
- **Smolt Numbers and Condition**
What can be done to ensure that smolts leave their rivers in the best possible condition?
What are the effects of physical barriers and of different flow levels on smolt condition and numbers (delay in timing of migration, disorientation etc)?

What evidence is there that that chemical pollution, even at very low levels, can affect smolt condition and, in particular, their ability to adapt to salt water; can these impacts be assessed and how can they best be addressed?

- **Drivers of smolt survival in estuaries and coastal waters**

What do we know about smolt behaviour, and survival, once they reach the sea?

What are the factors that promote survival in estuaries and coastal waters (e.g. high abundance of certain prey items) and minimize mortality (e.g. low abundance of or susceptibility to predators and diseases)?

How can we assess losses in estuaries and coastal waters and establish their causes?

What, if anything, can be done to reduce these?

(Factors that will need to be considered include aquaculture, predation, changing fishing pressures on smolt predators and prey, renewable energy, and other types of development).

- **Climate change impacts in rivers and oceans**

What is likely to be the impact of climate change on smolt numbers?

Will earlier smolt runs reduce feeding opportunities for post-smolts at sea?

Will temperature affect both freshwater and marine systems in a similar manner, or will there be a mismatch between timing of downstream migration and optimal marine conditions?

Is there likely to be a reduction in the age of smolting, and if so how will this affect survival?

Submission Process

The organisers would welcome proposals for oral presentations (PowerPoint supported) and poster submissions.

All abstracts should include the following information in this order:

- Title of the paper;
- Authors' full names with presenter's name highlighted;
- Email address of the presenting author;
- 100 – 200 word abstract on the paper's content, including its relevance to the conference themes;
- Preference for an oral or poster presentation.

All submissions will be reviewed by a Steering Group, which will aim, among other things, to ensure a balance between the different topic areas. To ensure this, or if requests for oral presentations are oversubscribed, a poster presentation may be offered instead.

All submissions should be sent to: administrator@atlanticsalmontrust.org

Enquiries about prospective submissions should be made to the AST's Research Director, Ken Whelan: ken.whelan@hotmail.com

Closing date for submissions 16th October 2016