

THE FISHERIES SOCIETY OF THE BRITISH ISLES

Annual International Symposium

7-11 July 2014 - University of Hull, UK

“Integrated Perspectives on Fish Stock Enhancement”



SYMPOSIUM PROGRAMME - DRAFT

MONDAY 7 JULY 2014

09.00-17.00 **EIFAAC workshop on Fish Stock Enhancement** - Updating the EIFAAC Protocol on Stocking and Introductions
Library, Thwaite Hall, Cottingham
Convener: Teppo Vehanen

16.00 – 21.00 Registration of symposium delegates in the Thwaite Hall, Cottingham. Dinner will be served from 19:30 in the dining room at Thwaite Hall.

TUESDAY 8 JULY 2014

08.30 - 09.00 Registration of delegates in the Leslie Downs/Basil Reckitt Lecture Theatres
Department of Chemistry, Ferens Building.

09.00 - 09.20 **Opening addresses**
Prof. Ian G Cowx, Director, Hull International Fisheries Institute (HIFI)
Prof. S. Kelly, Dean, Faculty of Science and Engineering, University of Hull.
Dr Ian Winfield, President of Fisheries Society of the British Isles

09.20 – 10.10 **Jack Jones Memorial Lecture:**
Learning from fisheries enhancements: critical insights and challenges for an integrative fishery science. K. Lorenzen (USA)

SESSION 1

Ecological and genetic impacts of stock enhancement -1

Chairperson: TBC

10.10 – 10.40 **KEYNOTE: Ecological and genetic impacts of stocking: a review of 20 years of experiments in the wild.**

McGinnity, P.; Prodöhl, P.; Cross, T. and Ferguson, A. (Ireland)

10.40 - 11.00 **Stocking of European eel into inland waters: a case study from River Elbe basin**
Brämick, Uwe; Fladung, Erik and Simon, Janek (Germany)

11.00 – 11.25 COFFEE/TEA

Chairperson: TBC

11.25 - 11.45 **Stocking and introduction of fish: do the criticisms hold up to criticism?**
Douglas, J.W. and Hunt, T. (Australia)

11.45 - 12.05 **Impacts of species invasions**

- 12.05 - 12.25 Poesch, Mark S.; Maitland, Bryan; Taylor, Mark and Vinebrooke, Rolf (Canada)
History and impact of fish introductions in Irish water
Quigley, Declan T.G. (Ireland)
- 12.25 - 12.45 **Largemouth bass stock enhancement in Florida**
Garlock, Taryn M.; Camp, Edward and Lorenzen, Kai (USA)
- 12.45 - 14.00 LUNCH – Basil Reckitt Lecture Theatre.

SESSION 2

Social and economic dimensions of fish stocking

Chairman: TBC

- 14.00 - 14.30 **KEYNOTE: Social and economic dimensions of fish stocking**
Arlinghaus, Robert; Riepe, Carsten; Pagel, Thilo; Beardmore, Ben and Hilsberg, Johanna (Germany)
- 14.30 - 14.50 **Stock enhancement to address multiple recreational fisheries objectives: an integrated model applied to red drum in Florida**
Camp, Edward; Lorenzen, Kai; Ahrens, Robert and Allen, Mike (USA)
- 14.50 - 15.10 **The introduced species fishery of Lake Naivasha, Kenya**
Hickley, Phil; Macharia, Simon; Muchiri, Mucai and Boar, Rosalind (UK & Kenya)
- 15.10 - 15.30 **Comparing leadership and social capital in two Mexican freshwater fisheries based on fish stocking**
Pérez-Ramírez, Mónica; García-Calderón, José L. and Ibáñez, Ana (México)
- 15.30 – 15.50 COFFEE/TEA

Chairperson: TBC

- 15.50 - 16.10 **A bioeconomic approach to investigating trade-offs among stocking and harvest regulations to manage recreational fisheries**
Johnston, Fiona D.; Allen, Micheal S.; Riepe, Carsten; Beardmore, Ben and Arlinghaus, Robert (Germany & USA)
- 16.10 - 16.30 **The folly of attempting to influence catch-effort in a recreational wild brown trout river fishery by supplementary stocking**
Frear, Paul A.; Axford, Stephen N. and Gifford, John D. (UK)
- 16.30 - 16.50 **Sixty years from the damming of the middle Zambezi by the Kariba dam, the changes of the fish and human populations.**
Piers, Adrian (Zambia)
- 17.00 Coaches depart University to Thwaite Hall
- 17.45 ***Coaches leaving Thwaite Hall to go to The Guildhall at 17:45 prompt.***
- 18:00 - 19.30 Civic reception at *The Guildhall*, hosted by the Lord Mayor of Kingston-upon-Hull.
- 19.30 ***Coaches leaving The Guildhall (returning to Thwaite Hall) at 19.30.***
Delegates may choose to stay and have a drink in Hull and/or dine in a nearby restaurant. A hot meal will be available at the Thwaite Hall on your return and the bar will be open.

WEDNESDAY 9 JULY 2014

SESSION 3

Eco-evolutionary dynamics and impacts of stocking programmes

Chairperson: TBC

- 09.00 - 09.30 **KEYNOTE: Unintentional selection, unanticipated insights: stocking programmes and the interplay between fish ecology and evolution**
Hutchings, Jeffrey A. (Canada)
- 09.30 - 09.50 **Considerations for use of hatcheries and hatchery-origin fish**
Hughes, Robert M. and Trushenski, Jesse T. (USA)
- 09.50 - 10.10 **Phenotypic mismatch in hatchery-reared Atlantic salmon stocked in the wild**
Stringwell, Rebecca; Lock, Alexandra; Stutchbury, Charles J.; Baggett, Edward; Taylor, John; Gough, Peter and Garcia de Leaniz, Carlos (UK)
- 10.10 - 10.30 **Effects of intensive rearing and size grading on post-release performance of Florida largemouth bass (*Micropterus salmoides floridanus*)**
Matthews, Michael D. and Lorenzen, Kai (USA)
- 10.30 - 10.50 COFFEE/TEA

SESSION 4

Ecological and genetic impacts of stock enhancement - 2

Chairperson: TBC

- 10.50 - 11.20 **KEYNOTE: There are [still] no salmon in the Yemen – 10 lessons we have learned from salmon & trout stocking**
Garcia de Leaniz, Carlos (UK)
- 11.20 - 11.40 **Investigation of Hungarian brown trout populations using PCR-RFLP and microsatellite markers**
Ősz, Ágnes, Kánainé Sipos, Dóra, Horváth, Ákos, Kovács, Balázs, Hoitsy, György, Snoj, Aleš, Bogataj, Klavdija, Bernáth, Gergely, Herzinyák, Zita, Kaczkó, Dániel, Urbányi, Béla (Hungary)
- 11.20 - 11.40 **Microsatellite and snp markers reveal significant genetic impact of hatchery stocking on native Atlantic salmon populations in Gulf of Finland, the Baltic Sea**
Gross, Riho; Vasemägi, Anti; Burimski, Oksana and Ozerov, Mikhail Y. (Estonia & Finland)
- 12.00-13.00 **FISHERIES SOCIETY OF THE BRITISH ISLES –ANNUAL GENERAL MEETING**
- 12.45 - 14.00 LUNCH

SESSION 5

Ecological and fishery conditions for additive effects of stocking

Chairman: TBC

- 14.00 - 14.30 **KEYNOTE: Ecological and fishery conditions for additive effects of stocking**
Aprahamian, Miran (UK)
- 14.30 - 14.50 **Additive versus replacement effects of stock-enhancement exemplified by juvenile pike (*Esox lucius* L.) Stocking into German gravel pit lakes**
Hühn, Daniel; Gwinn, Daniel C.; Shaw, Stephanie; Allen, Micheal S.; Skov, Christian and Arlinghaus, Robert (Germany, USA & Denmark)
- 14.50 - 15.10 **Additive effects of large-scale fish stocking for enhancing recreational fishing**

- Hunt, Taylor L.; Ingram, Brett A.; Giri, Khageswor and Lyon, Jarod (Australia)
15.10 - 15.30 **Fish stock enhancement with non-indigenous fishes: experience from Vellayani Lake, India**
Sandhya R.; Sary P.S.; Anitha R.; Deepak, George Pazhayamadom; Bijukumar A. and Pramod Kiran R.B. (India)
- 15.30 - 15.50 COFFEE/TEA & POSTERS
- 15.50 - 16.10 **Assessing the decline in western school prawn (*Metapenaeus dalli*) abundance in a temperature Australian estuary: evaluating the effectiveness of prawn releases and the impacts of environmental change**
Tweedley, James R.; Loneragan, Neil R.; Jenkins, Greg; Trayler, Kerry and Chaplin, Jennifer (Australia)
- 16.10 - 16.30 **Monroe reservoir walleye: evaluating predictors of recruitment success**
Doll, Jason C.; Lauer, Thomas E. and Clark-Kolaks, Sandra (USA)
- 16.30 - 16.50 **Restoring Indigenous Fisheries in Nimiipuu Country: balancing hatcheries, habitat, and harvest.**
Penney, Zachary L. (USA)
- 17.00 Coaches depart University to Thwaite Hall
- 19.00 BBQ Thwaite Hall

THURSDAY 10 JULY 2014

SESSION 6

Physiological, cognitive and behavioural determinants of fitness of stocked fish

Chairperson: TBC

- 09.00 - 09.30 **KEYNOTE: Environmental effects on behavioural development: consequences for fitness of captive-reared fish in the wild**
Johnsson, Jörgen I. (Sweden)
- 09.30 - 09.50 **Silver-spoons in the rough: can environmental enrichment improve survival of hatchery fish in the wild?**
Roberts, Laura J.; Taylor, John; Gough, Peter; Garcia de Leaniz, Carlos (UK)
- 09.50 - 10.10 **Effect of enrichment on behaviour and survival of released salmon fry**
Salvanes, Anne G.V.; Skoglund, Helge; Kambestad, Ove; Henden, Geir Ove and Barlaup, Bjørn (Norway)
- 10.10 - 10.30 **Enhancing stocking success by determining the thermal history and temperature requirements of recently stocked American eels (*Anguilla rostrata*) as determined from otolith isotopic chemistry**
Holden, Courtney V.; Casselman, John M. and Kyser, T. K. (Canada)
- 10.30 - 11.00 COFFEE/TEA

Chairperson: TBC

- 11.00 - 11.20 **Structural tank enrichment affect behaviour and stress physiology in Atlantic salmon reared for stocking**
Näslund, Joacim; Rosengren, Malin; Sundell, Kristina; Johnsson, Jörgen I. and Kvingedal, Eli
- 11.20 - 11.40 **Does reduced feeding prior to release improve the marine migration of hatchery sea trout?**
Davidson, Jan G.; Daverdin, Marc; Sjørnsen, Aslak D.; Rønning, Lars; Arnekleiv, Jo V. and Koksvik, Jan I. (Norway)

- 11.40 - 12.00 **Dispersal of stocked cyprinids in a small English river: comparison to wild fish using a multi-method approach**
Bolland, Jonathan D.; Cowx, Ian G. and Lucas, Martyn C. (UK)
- 12.00 - 12.20 **Can stocking with vendace larvae sustain yields?**
Wanke, Thomas; Brämick, Uwe and Mehner, Thomas (Germany)

12.30 - 14.00 LUNCH

SESSION 7

Institutional dimensions and governance of stocking

Chairman: TBC

- 14.00 - 14.30 **KEYNOTE: Optimizing stocking rates in spatially structured recreational fisheries**
Post, John R.; Ward, H.; Newton, E.; Cantin, A. and Wilson, K. (Canada)
- 14.30 - 14.50 **Managing conflicts arising from fisheries enhancements based on non-native fishes in Southern Africa**
Ellender, Bruce R.; Woodford, Darragh J.; Weyl, Olaf L.F. and Cowx, Ian G. (South Africa & UK)
- 14.50 - 15.10 **Assessing Lake Michigan salmonid stocking policies using decision analysis**
Tsehaye, Lyob and Jones, Michael (USA)
- 15.10 - 15.30 **Institutional performance of fish stocking in Mexico**
Ibáñez, Ana; Pérez-Ramírez, Mónica and García-Calderón, José L. (México)
- 15.30 - 15.50 COFFEE/TEA & POSTERS
- 15.50 - 16.10 **Introduction of arctic char in Colorado: outcomes and management possibilities**
Johnson, Brett; Olsen, Devin and Silver, Douglas (USA)
- 16.10 - 16.30 **ENSARS – A modular risk analysis decision-support scheme for assessing the risks of using of alien species in European aquaculture and stock enhancement**
Copp, Gordon H. (UK)
- 16.30 - 16.50 **Re-establishing programmes in Norwegian rivers after rotenone treatment**
Jøranlid, Anne Kristin (Norway)
- 16.50 - 17.10 **The application of environmental impact assessment to large scale marine restocking programs: a case study from Australia**
McPhee, Daryl P.; Blount, C. and Boyd, S. (Australia)
- 17.15 Coaches depart University to Thwaite Hall
- 18.30 ***Coaches leave Thwaite Hall to go to The Deep at 18:30 prompt.***
- 19.00 - 23.00 Visit to **The Deep** aquarium in Hull (including **conference dinner & drinks reception**).
 The drinks reception at The Deep is kindly sponsored by Wiley.

FRIDAY 11 JULY 2014

SESSION 8

Planning and risk management in stocking and introduction programmes

Chairperson: TBC

- 09.00 - 09.30 **KEYNOTE: Accounting for risk and uncertainty in stock enhancement protocols**
Cowx, Ian G. (UK)
- 09.30 - 09.50 **A risk based approach to the introduction and keeping of fish in inland waters**
Hewlett, Nigel H.; Lidgett, Paul and Taylor, Adrian (UK)
- 09.50 - 10.10 **New guidelines for stock enhancement for anadromous salmonids in Norway**
Jøranlid, Anne Kristin (Norway)
- 10.10 - 10.30 **Risk based management for successful freshwater fish stocking in New South Wales, Australia**
Doolan, Ben J. and Westaway, Cameron
- 10.30 - 11.00 COFFEE/TEA
- 11.00 - 11.20 **Canals as exotic species vectors**
Marsden, J. Ellen and Ladago, Bret J. (USA)
- 11.20 - 11.40 **Estimating time-varying mortality from fishery captures of hatchery-reared juvenile meagre (*Argyrosomus regius*)**
Gil, Maria del Mar; Palmer, Miquel; Grau, Amalia and Balle, Salvador (Spain)
- 11.40 - 12.00 **EIFAAC Protocol on Stocking and Introductions**
Vehanen, T. (Finland)
- 12.00 **End of Symposium**
- 12.00 LUNCH AND DEPARTURE