Session C2: Eel Recovery – It is not Just About Fishing

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Sustainable Eel Group

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Eel Recovery – it is not just about fishing

Fish Migration Conference
22nd June 2015
Holland
The Sustainable Eel Group

• SEG building the Network of collaboration
  – With Science
  – With Conservation (NGO’s)
  – With the Fishery and Industry

• SEG and Blocked Migration Pathways
  – Scale of the challenge
  – Latest from SLU in Sweden

• SEG What next?
Forming SEG during 2010

Our First of many European Meeting.
At Hamburg May 2010

IFM and EA Eel Conference
Bridgwater April 2009
SEG’s Objectives

Accelerating the Eel’s Recovery

• To help deliver the objectives of the EU Eel Regulation

• To develop, decipher and apply sound science to inform effective decision making

• To Influence policy makers at UK and European Levels

• To encourage well regulated and sustainable fisheries that support local economies and communities

• To promote greater public understanding of the eel

• To be effective at seeking income and resources to progress the aims of the group

A Rivers Trust and EA Solution on the Severn
The UK Minister Presents SEG’s 5th Anniversary Achievement Awards for sustainability to eel leaders from Science, Conservation and the Industry.

April 2015 - Collaboration
# Eels need our help

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Long term measures</th>
<th>Emergency measures</th>
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</table>
| **Increase recruitment in** | • Unblock migratory pathways in  
• Reduce eel mortality                                                           | • Glass eel restocking / translocation with fishermen                |
| **Increase escapement out** | • Unblock migratory pathways out  
• Increase Escapement                                                              | • ‘Eels over the barriers’ with fishermen 40%                           |
Help Eels to ‘get in’

2,278 Sluice Gates
8,488 Dams
4,671 Water Pumps

Obstacles to river flow inventoried in France within the ROE database

R. Severn RBD Eel Management Plan

France

Holland
The new St Germans Pumping Station near Wiggenhall St Germans, Kings Lynn. It is one of the largest pumping stations in Europe.

During the first three weeks of opening April 2014 some 50,000 elvers made their way through the pass.

We all know this works so why not do it?
Type: Eel trapping kit

Eel Pass, Arzal dam
Vilaine river

Estuarine eel ladder with counting facilities
using modular eel ladder.

Eel ladder left bank

Vilaine Atlantic
France

2010  0.5m
2014  5.58m

‘best since 1996’

“We all know this works so
why aren’t we doing it?”

Eel ladder managed by EPTB Vilaine

After a very bad recruitment in 2011. The count of glass eel and elvers increase,
the last two years are the best one since 1996 (2014 partial count).

Fish-Pass
ZA de 3 prés 35890- LAILLE - France
Te : + 33 2 89 77 11 11 E mail: fishpass@fish-pass.fr
<table>
<thead>
<tr>
<th></th>
<th>2014 (million)</th>
<th>2013 (million)</th>
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</thead>
<tbody>
<tr>
<td>Germany</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>France</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>UK &amp; Ireland</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Holland</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>5</td>
<td>?</td>
</tr>
<tr>
<td>Poland</td>
<td>3</td>
<td>?</td>
</tr>
<tr>
<td>Estonia</td>
<td>3</td>
<td>?</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90 +</strong></td>
<td><strong>40+</strong></td>
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</table>

**Juvenile Eel translocation an Emergency Measure**

All numbers are approximations based on weight.
SEG only supports sustainable and legal fisheries that meet the Standard.
The mature Standard released at the 2013 Conference. It builds on the experience of 50 assessments. SEG will continue to consult, review and improve.
ISEAL Credibility Principles
written into the three Codes

• Setting Environmental Standards
• Assuring Compliance
• Assessing Impacts
Help eels to ‘get out’……..

25,000 Hydropower stations & many 10,000’s water pumping stations are killing hundreds of thousands of mature eels each year
‘Every time I see this plot I am surprised how important restocking has become in Sweden and how much the composition has changed’ Willem Dekker 8th June 2015

‘The fishery has a double role and hydropower the main mortality but the bottom line is hydropower provides the main money so RESTOCKING, FISHERY HYDROPOWER are all interdependent’ Willem Dekker 8th June 2015

see WWW.KRAFTTAGAL.SE for report
“Progress was made in implementing management measure related to fisheries but that other management measures, such as improving habitats, combating parasites or predator control have often been postponed or only partially implemented.”

“More attention should be given to management measures related to these non-fishing anthropogenic mortality factors, the majority of which has only partially been implemented by Member States.”

“Non-fishing anthropogenic mortality factors include hydropower and pumping stations, habitat loss or degradation, pollution, diseases and parasites.”
A threat to eel or an opportunity?

UK Tidal Energy Opportunities

- Island nation with largely untapped marine energy resource – best in Europe
- Tidal lagoons require:
  - Shallow water
  - Large tidal range
- Difference in high tide times around the UK creates potential to produce 24-hour base-load renewable electricity from a network of lagoons
- Essential part of energy mix and a new exportable industry
The European Maritime And Fisheries Fund 2014-2020

€6400M
Allocated in total from 2014-2020.

Distributed between:

11%
Managed by the European Commission
To support EU-wide objectives in maritime and coastal affairs:
- International governance
- Cooperation through exchange of information and best practices
- Public information and support to networking platforms
- Marine Knowledge
- Maritime Spatial Planning

89%
Managed by the member states
Divided amongst EU countries, the funds are used for:
- Reducing impact of fishing on the marine environment
- More market tools for professionals and consumers
- Joint stewardship of protected areas and Natura 2000 sites
- Special support to small-scale fishermen
  Among which:

€4340M
Sustainable Fisheries
Making fisheries and aquaculture more sustainable and profitable:
- Ensuring and creating sustainable jobs
- Local development and support to fisheries areas
- Marketing and processing

€580M
Control and Enforcement
To monitor compliance with the European Common Fisheries Policy and protect a fair access to healthy stocks:
- Access to fishing grounds
- Controlling fishing effort, TACs and quotas
- Other technical measures to improve selectivity and sustainability

€520M
Data Collection
To collect the data the scientists need to improve our knowledge of the seas and the long term management of our fisheries:
- Understanding and monitoring of commercial species
- Dynamics of single stocks and mixed fisheries
- Ecological modelling of regional basins

€71M
Blue Economy
To unlock sustainable growth and job creation from our seas and oceans, in areas such as:
- Maritime surveillance (CISE)
- Improved knowledge of the seas and ecosystems
- Enabling rational exploitation of new marine resources (e.g. energy, biotech)

Investment opportunity to fund solutions
SEG the Focus Points – it is not just about fishing

• More of the Same in partnership
  – Unblock the migration pathways across Europe
  – Build conservation projects in partnership
  – Tell the whole eel story
  – Only support the fishery & industry where the SEG Standard is met

• More and better measurement at all life stages

• Make the 60/40 happen

• End the Poaching, illegal / criminal trade

• Achieve the 40% Silver Eel escapement
SPARE
Unblocking the migration pathways has started…so much more is needed.
The Eel Habitat sub Group meeting at ZSL
Science, Conservation and the Industry together

Alistair Maltby
Director Rivers Trust

Alan Walker
CEFAS
ICES Scientist

Miran Aprahamian
EA
ICES Scientist

Rivers Trust Scientists
Michelle and Polly

Brian Knights
retired ICES Scientist

Peter Wood
industry

EA Regional
Eel Champion

COLLABORATION
"At this point SEG does not have any fishery independent data for 2015 and the 5 year rolling average gives the best guide to trends as natural conditions especially water temperature and volume have a huge impact on productivity.

For France the fishing boats have been reduced by more than a half and in 2015 some 26 tons plus were caught say 75 to 100 million fish.

For England the fishery will not match the 2013 and 2014 seasons which were the best for decades. The 2015 data is being collated and is likely to be at the same levels as the 2012 and 2011 seasons and definitely better than the very low recruitment of the period 2005 to 2010. The range is 7 to 10 million fish.

Typically France catches 10 times England."

A short statement would be

"Over 100 million were caught this year. Levels were comparable to the 2011 and 2012 seasons and better than the lows of 2005-2010"