A Reappraisal of the History and Economics of the Pacific Oyster in Britain

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15th September 2015
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The Pacific Oyster (*Crassostrea gigas*) in the UK: Economic, Legal and Environmental Issues Associated with its Cultivation, Wild Establishment and Exploitation

Report for the Shellfish Association of Great Britain

Final: August 2012
An **SAGB** funded project


Thanks to SAGB, Tom Pickerell, David Jarrad and the Steering Committee
Fisheries are stagnant, growth in aquatic products is driven by aquaculture.
Pacific oyster: World aquaculture production

(FAO)
Crassostrea gigas in the UK

Crassostrea gigas = Crassostrea angulata

- 1890 First introduction (as Portuguese oyster) in response to the crash of native oyster Ostrea edulis
- 1926 First introduction as Pacific oyster
- 1962 Importation of Pacific oyster seed stops (disease)
- 1965 Species thought to have died out in Britain
- 1967 Pathogen free C. gigas introduced via MAFF lab Conwy
- 1982 Exemption from Wildlife & Countryside Act restrictions
Market structure for UK Pacific oyster production showing value chain and price points.

Arrows indicate the movement of oysters.
Economic value

2011/2012 UK figures rounded

• 1,200 tonnes of Pacific oyster annual production;

• 67% is exported across the globe from France to south-east Asia.

• Estimated total economic contribution including indirect and induced effects is
  Gross output = £13 million (5 times the value at first sale)
  GVA (Gross Value Added) = £10 million.

These values do not include seed production.
# British oyster industry

Production & value estimates (approximations)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (tonne)</th>
<th>GVA* (at 2012 prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1851</td>
<td>43,000</td>
<td>£180million ?</td>
</tr>
<tr>
<td>1870</td>
<td>120,000 ?</td>
<td>£500million ?</td>
</tr>
<tr>
<td>1886</td>
<td>3,500</td>
<td>£15 million ?</td>
</tr>
<tr>
<td>2012</td>
<td>1,200</td>
<td>£10 million</td>
</tr>
</tbody>
</table>

* GVA is “Gross Value Added” to the economy

? Assumptions: 1. Oyster value in a mass market = 50% of value in a prestige market
2. Similar supply chain relationships
Pacific oyster aquaculture production in the UK and its neighbours (tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year 2005</th>
<th>Year 2006</th>
<th>Year 2007</th>
<th>Year 2008</th>
<th>Year 2009</th>
<th>Year 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>118,120</td>
<td>110,706</td>
<td>110,800</td>
<td>103,799</td>
<td>103,467</td>
<td>95,000</td>
</tr>
<tr>
<td>Ireland</td>
<td>5,811</td>
<td>6,511</td>
<td>7,661</td>
<td>6,188</td>
<td>6,488</td>
<td>6,942</td>
</tr>
<tr>
<td>UK</td>
<td>922</td>
<td>1,376</td>
<td>1,329</td>
<td>#</td>
<td>#</td>
<td>1,150</td>
</tr>
<tr>
<td>Channel Islands</td>
<td>592</td>
<td>600*</td>
<td>737</td>
<td>835</td>
<td>911</td>
<td>924</td>
</tr>
</tbody>
</table>
Question

With a world market of 4 million tonnes and growing
a coast with over 150 fertile estuaries
a warming climate and sea temperature

Why

is British oyster production $100^{\text{th}}$ of what it was?

is British oyster production $100^{\text{th}}$ that of France?
Acknowledgements

• SAGB and the Project Steering group (Chaired by Tom Pickerell then David Jarrad)

• Industry participants especially the Essex & Poole oyster men

• Cefas

• IFREMER