SR668 - Use of discards in bait

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Background & introduction

- Defra ‘Fishing for the Markets’ initiative recommended further investigation into use of discards in fish meal and as pot bait.
- In contrast to whitefish fleets the shellfish sector has steadily increased, as seen by many fishermen as a means of diversification into less restricted fisheries.
Background & introduction

- Demand for bait increasing as competition (and price) for traditional bait species increases

<table>
<thead>
<tr>
<th>Seafish economic survey data (2012)</th>
<th>Average Days at Sea</th>
<th>Average Turnover</th>
<th>Average bait cost</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK Pots and traps under 10m</td>
<td>109</td>
<td>53608</td>
<td>1439</td>
<td>3%</td>
</tr>
<tr>
<td>UK Pots and traps 10-12m</td>
<td>153</td>
<td>101198</td>
<td>4528</td>
<td>4%</td>
</tr>
<tr>
<td>UK Pots and traps over 12m</td>
<td>168</td>
<td>312959</td>
<td>27143</td>
<td>9%</td>
</tr>
</tbody>
</table>

- Does the landings obligation offer the possibility of a win:win?
Approach

In order to investigate the use of discards as pot bait supply the project was divided into four key stages; namely:

i. to review the bait supply chain involving interviews with a wide range of stakeholders and through desk-top research;

ii. to collate and review available discard data (by species, fisheries and areas) gathered from a range of sources;

iii. to undertake commercial sea trials in different areas and fisheries to test the effectiveness of discard species as pot bait;

iv. On completion of i), ii) and iii) to assess the feasibility of using discards in pot fisheries and report findings.
Approach

- **Desk-top study and interviews:**

  ![Chart showing stakeholders interviewed](chart.png)

  - Potters 40%
  - Trawlers 8%
  - Industry bodies 10%
  - IFCAs 6%
  - MMO 4%
  - DEFRA 2%
  - Pot suppliers 4%
  - Bait suppliers 10%
  - Processors 8%
  - Logistics 8%
  - MMO 4%
  - DEFRA 2%
  - Pot suppliers 4%
  - Bait suppliers 10%
  - Processors 8%
  - Logistics 8%

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Approach

- **Gear trials**
  - Investigating catch rates of discard bait vs control bait
  - Vessels chosen by size, fishing area and target species
  - Self sampling with random roving observer coverage
Results

**Supply vs demand:**

<table>
<thead>
<tr>
<th></th>
<th>Estimated discard landings (i.e. supply) by English fleet (tonnes)</th>
<th>Estimated demand for bait by English potting fleet (tonnes)</th>
<th>Supply-demand (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North sea</td>
<td>4055</td>
<td>7532</td>
<td>-3478</td>
</tr>
<tr>
<td>Celtic sea &amp; western approaches</td>
<td>2284</td>
<td>12492</td>
<td>-10208</td>
</tr>
<tr>
<td>Irish sea</td>
<td>206</td>
<td>393</td>
<td>-188</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6543</strong></td>
<td><strong>20417</strong></td>
<td><strong>-13874</strong></td>
</tr>
</tbody>
</table>
Results

- **Sea trials**
  - Offshore Crab fishery – whole haddock vs coley frames

![Bar chart showing results of sea trials](chart.png)

**Trial bait**

**Control**

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Results

- **Sea trials**
  - Inshore mixed fishery – whole haddock vs processor waste
Results

- **Sea trials**
  
  - Mid-shore Crab fishery – economic performance of different baits (£ per string)
Discussion

• Cost is key – discard bait will not be ‘free’ and many potters are currently in symbiotic relationship with processors: free bait = zero waste cost
• Location – bait costs increase with distance from larger ports
• Who pays? – for discard storage, freezing and transport?
• Pot type has a significant bearing on bait that can be used
Conclusions

1. Virtually all TAC species currently discarded in English demersal fisheries could be used as pot bait (fresh or frozen) for crab, but there is little / no demand for discard species as lobster bait.

2. Demand for bait far outstrips the ‘worst case’ (i.e. no exemptions applied) supply of discards from English registered vessels.

3. Policy decisions taken on implementation likely to have the greatest bearing on discards to be used at pot bait.

4. The degree to which discards could replace existing baits will largely depend on price.
Conclusions

5. Managing the supply of a solely fresh discard / bait supply chain will be difficult and as a result freezing of discards destined for the pot bait market is likely to be the norm and will incur production and logistical costs.

6. Consideration should be given to the displacement of fish processing by-product as pot bait with discards – driving up the operating costs of fish processors.

7. SW England is likely to be the highest area of both supply and demand. The NE will potentially need to import bait from other areas, most likely from Scotland.

8. The role of Producer Organisations (POs) in managing discards, in respect of the new CMO Regulation, needs to be further clarified and discussed.
Questions

Dawning of a new day (and possibly a new era.....)