The age structure of UK caged egg production facilities
Executive summary

In 2012 the use of conventional battery cages for egg production will be banned in the European Union (EU) in accordance with Directive 1999/74/EC on the protection of laying hens. Caged egg producers across the EU will need to change their production methods to one of the following systems: enriched battery cages, barn, free-range or organic.

The Directive allowed a 12-year period before producers are required to stop egg production using conventional cages, with the assumption that the investment producers had made in existing cage facilities would be largely written off by 2012.

Contrary to this, new independent research commissioned by the RSPCA reveals that the vast majority of UK caged egg producers will already have written off previous investment costs by 2012 and would need to invest in new facilities by then, irrespective of the Directive.

The RSPCA believes that both conventional and enriched battery cages are unacceptable for laying hens on welfare grounds, as evidence shows that they do not adequately satisfy the hens’ behavioural and physical needs. On these grounds, the RSPCA is calling for a ban on all cage systems and for them to be replaced with well-managed alternative systems, namely barn and free-range, which offer higher welfare standards for the hens. It is also urging that full implementation of the Directive is not delayed by the review process.

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1 Evidence given by the British Egg Industry Council (BEIC) to the Environment, Food and Rural Affairs Committee on 16 July 2003. This can be accessed on the internet at www.publications.parliament.uk/pa/cm200203/cmselect/cmenvfru/779/3061703.htm

2 The case against cages: Evidence in favour of alternative systems for laying hens. 2005. RSPCA.
New independent research commissioned by the RSPCA highlights that 98 per cent of caged egg producers will have written off their investments in conventional cage facilities and will need to invest in new facilities irrespective of Directive 1999/74/EC when it comes into force in 2012.

These new findings—which use a typical 10-year write-off period for capital investments—provide strong evidence that the write-off cost must not be used to delay the full implementation of Directive 1999/74/EC during its impending review.

The research also reveals that more than a third (35 per cent) of producers are planning to house their laying hens in barn systems from 2012.

This finding reinforces previous independent research commissioned by the RSPCA which demonstrates that the cost of some alternative systems, in particular multi-tier barn, are comparable to those of enriched cages.*

The RSPCA welcomes the potential growth of the barn system because of the significant animal welfare benefits that this system can provide in comparison to enriched cages.

Key research findings

From the findings of the telephone survey of 126 UK caged egg producers, covering 28 per cent of the UK caged flock, the following conclusions can be drawn.

- Assuming a typical 10-year write-off period, just two per cent of UK conventional caged egg producers would incur a one-off write-off cost due to the full implementation of Directive 1999/74/EC—at a total cost of about £19 million.
- More than one-third of caged egg producers (35 per cent) surveyed already use at least one alternative (non-cage) production system in addition to conventional battery cages. This implies that a significant number of caged egg producers already have the skills necessary to switch to, or expand, alternative production systems rather than installing new enriched battery cages.
- There is some confusion among egg producers over the terminology used to describe cage facilities, particularly in relation to the definition of enriched and enrichable cages*, which suggests the need for producers to be provided with clear information about the requirements of Directive 1999/74/EC.
- Of those producers planning to remain in the egg industry after 2011, the indication is that nearly half of their hens may be kept in alternative barn or free-range systems.

The survey can be regarded as robust as it is based on 126 interviews of caged egg producers, some of whom have multiple systems. This accounts for more than one-fifth (21 per cent) of the overall UK laying flock and represents some 6,497,400 laying hens of which 5,403,550 were housed in conventional battery cages. Therefore, some 28 per cent of the estimated 19.2 million UK caged egg producing hens was covered by the survey.

The sample data was divided into three size-categories of production, which provided a roughly equal number of respondents in each group:

- Small—less than 5,000 laying hens
- Medium—between 5,000 and 20,000 laying hens
- Large—more than 20,000 laying hens.

In the UK egg industry a mere 300 or so egg producers account for around 80 per cent of total egg production in large systems. Table 1 also demonstrates that a relatively small number of holdings accounted for the vast majority of laying hens within the sample.

Research methodology

A telephone survey of UK caged egg producers was conducted in 2005. Only respondents with more than 350 laying hens in conventional cages were selected for interview, as the Directive does not apply to producers with fewer hens. The interviews were carried out using a Computer Assisted Telephone Interviewing (CATI) unit.*

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Table 1 – flock size

<table>
<thead>
<tr>
<th>Respondents</th>
<th>5,000</th>
<th>10,000</th>
<th>More Than 20,000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>41</td>
<td>43</td>
<td>126</td>
<td></td>
</tr>
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Table 2 – average number of laying hen places per producer

<table>
<thead>
<tr>
<th>Total number of laying hen places in survey</th>
<th>Total number of laying hen places in UK</th>
<th>Proportion of total laying hen population kept in this system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional cages</td>
<td>42,885</td>
<td>5,403,550</td>
</tr>
<tr>
<td>Enriched cages</td>
<td>2,248</td>
<td>283,300</td>
</tr>
<tr>
<td>Enrichable cages</td>
<td>1,266</td>
<td>159,500</td>
</tr>
<tr>
<td>Barn</td>
<td>2,838</td>
<td>357,650</td>
</tr>
<tr>
<td>Free range</td>
<td>2,186</td>
<td>275,400</td>
</tr>
<tr>
<td>Organic</td>
<td>143</td>
<td>18,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>51,566</td>
<td>6,497,400</td>
</tr>
</tbody>
</table>

* Agra CEAS Consulting (2004b). Research into the costs of egg production, using a range of production systems. Report for the RSPCA.

** Agra CEAS Consulting (2005). Research into the age of UK caged egg production systems. Report for the RSPCA.
For the purpose of this research, a 15-year period was selected to allow a 50 per cent margin for error. However, when respondents were asked what period they used over which to write-off capital investments in cages, the mean* answer was 13 years and the median** was 10 years – in agreement with the previous research. A 10-year write-off period for capital investments in cages is considered to be typical. For the purpose of this research, a 15-year period was selected to allow a 50 per cent margin for error. However, when respondents were asked what period they used over which to write-off capital investments in cages, the mean* answer was 13 years and the median** was 10 years – in agreement with the previous research.

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** The median represents the central point in the data with half the observations being higher and half lower.

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When the Directive was introduced in 1999, a 12-year period was established before producers were required to stop egg production in conventional cages. This should have ensured that only a small number of producers would incur a write-off cost for existing investments in conventional cages, however, the extent to which this is the case in the UK has been unknown up to now.

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Conclusion

Independent research commissioned by the RSPCA has provided a unique insight into the UK caged egg industry prior to the full implementation of Directive 1999/74/EC. The research shows that the majority of caged egg producers will have written off their current investments in conventional cage facilities by 2012 and would need to invest in new facilities irrespective of the Directive. Therefore there is no justification for using this issue as a reason for delaying the implementation of the Directive beyond 2012.

The research also suggests that of those producers planning to remain in the egg industry the indication is that nearly half of their hens may be kept in alternative barn or free-range systems. With six years to go before the ban on conventional cages comes into effect, the UK egg industry must now make it a priority to ensure producers are ready to meet the 2012 deadline.

Respondent view on Directive 1999/74/EC

As part of the survey producers were asked which production system they planned to use from 2012 when the Directive will be fully implemented and conventional battery cages will no longer be permitted:

- 29 per cent were unable to answer
- 17 per cent intend to leave the egg industry and not invest*
- 17 per cent intend to retire from farming at or by this point*
- 37 per cent indicated they would continue in egg production.

Figure 3 demonstrates the proportion of laying hens that the survey results predict are likely to be held in each system by producers currently producing caged eggs. The majority of their laying hens are expected to be held in enriched cage facilities, with a greater proportion of their laying hens expected to be kept in barn systems than free-range.

Figure 3 – post-2011 laying hen places by production system planned by producers currently producing caged eggs

Source: Survey data.

In terms of investment planning, just nine per cent of respondents have firm plans to invest in enriched cages.

These respondents indicated that they would begin investing in 2006 and that it would take, on average, three years and six months to completely replace the existing cages. This suggests that more producers need to start planning to convert existing conventional caged facilities from mid-2006 to meet the 2012 deadline.

* It should be noted that even though 34 per cent of producers plan to either leave the egg industry or retire, it is likely that at least some of the units will remain but be operated by other people.

Free-range hens.
What the RSPCA wants

- The ban on conventional battery cages in 2012 to be upheld in the review of the European Laying Hen Directive 1999/74/EC.
- All cage systems for laying hens to be banned by 2012.
- All hens to be kept in well-managed alternative production systems namely, barn and free-range.
- All eggs and egg products – produced within and outside the EU – to be clearly labelled according to the method of production and country of origin.
- Retailers to sell only eggs and products containing eggs that are from hens kept in barn and free-range systems, with imported eggs attaining the minimum production standards equivalent to those in the UK.