INTRODUCTION
FARM ANIMAL INDICATORS 2005–2009

Over the past five years much has happened in the area of farm animal welfare, with some important developments occurring on key issues for several species.

- In January 2005, the new EU Regulation on the protection of animals during transport[1] was introduced, and subsequently transposed into UK law in 2006[2]. It included some improvements such as tighter requirements for horse transport and stricter criteria on whether animals are fit to travel. Subsequent development and application of training and competency tests for livestock hauliers, and vehicle assessments for lorries undertaking long distance journeys, have followed. However, concerns remain about the real effects of all these on improving the welfare of transported animals across the EU, and about the level and quality of enforcement.

- The RSPCA's work on improving the welfare of meat chickens has been sustained at a high level throughout the last five years. In 2005, an RSPCA report[3] and other activities that year aimed to influence decision makers responsible for drawing up the provisions of the proposed EU Directive[4] on the protection of meat chickens. The Directive was finally agreed in 2007. It fell short of addressing a number of the RSPCA's concerns, though included a few positive provisions with the potential to improve welfare. In 2006, the Society took a revolutionary step to address the health and welfare problems associated with fast growth rate in chickens, by setting an upper limit on the genetic growth rate permitted under its own welfare standards for meat chickens. This standard must be adhered to by all chicken producers in the RSPCA's Freedom Food scheme[5], and has also helped to influence the major global chicken breeding companies. By 2009, all three of the biggest companies were working on this issue, with two of them producing a breed of chicken that met the RSPCA's growth rate requirement, and more than 60 million such chickens were reared under the Freedom Food scheme during that year.

- Laying hen welfare has remained high on the agenda. Activities by the RSPCA and others to ensure that the EU-wide ban[6] on conventional battery cages – planned for 2012 – remained intact included the issuing in 2005 of an RSPCA technical report[7] which set out the welfare and market reasons for sticking with the ban. In 2009, the UK government officially confirmed that conventional cages would indeed be banned in the UK from 2012. The European Commission also confirmed their commitment to the ban, though the situation in a few EU member states remains uncertain. Alongside this, work to improve and refine alternative non-cage systems for egg production has continued, including various research projects aimed at maximising the welfare of free-range birds. An RSPCA-funded project aimed at improving the quality of the outside range for free-range hens was initiated in 2008[8] and will help to provide further information on how to encourage hens to make best and full use of the outside range. In the meantime, demand for non-cage eggs in the UK has continued to grow year on year, with 45 per cent of whole eggs now from free-range or barn systems.

- Over the past five years, awareness of the welfare issues affecting dairy cattle has started to rise. This includes a better understanding of the role played by genetic selection in influencing health and welfare, knowledge that is now beginning to be applied by breeding companies. In addition, there has been a growing willingness in recent years from all sectors – food and farming industries, government and NGOs – to work together to address some long-standing concerns associated with the dairy industry such as the export of 'surplus' dairy bull calves to Europe for veal production. New activities and practices inspired and supported by the Calf Forum[9] – a collaborative initiative initiated in 2006 by the RSPCA and Compassion in World Farming – have made a tangible difference to the numbers of animals exported, with more now being retained for rearing in the UK. Nevertheless, some important welfare concerns remain in this sector, leading in 2009 to a call from the RSPCA through national media for the development of a National Dairy Cow Welfare Strategy that identifies and proposes strategies aimed at addressing those concerns across the UK dairy herd.

- The past five years have seen a considerable growth in aquaculture. The RSPCA's work in the area of salmon farming has included significant development of its own welfare standards to cover all stages and aspects of this highly technical area of farming. Greater understanding of the potential of fish and other marine creatures to suffer





has also led to other developments in their treatment, including at the time of killing, with new more humane methods and equipment being developed for stunning/killing fish and crustaceans such as crabs.

- Developments in a number of areas of pig production and welfare over the past five years have in some respects been considerable. The RSPCA's own standards have themselves seen substantial change during that period, including in the area of farrowing accommodation (i.e. setting standards phasing out use of conventional farrowing crates[10] in 2005 and of any close confinement in 2009). Considerable activity at a European level in several key welfare areas such as castration and, nearer to home, Defra's and the UK pig industry's decisions to fund various welfare-focused research projects including on free farrowing and tail biting, indicate the potential that now exists for significant positive change in the way pigs are farmed, with a review of the EU Directive planned. The RSPCA launched its pig campaign in 2009, with the dual aim of influencing the legislative review and of pressing for clear, transparent labelling of pig meat products with the method of production.

- Since 2005, the RSPCA has been developing and applying a prototype method of assessing farm animal welfare on farm. This 'outcome' assessment has been largely based on the method developed in an RSPCA-funded pioneering project undertaken by Bristol University, started in 1999. Over the past five years or so, huge developments in the area of welfare outcome assessment have occurred. It is now generally accepted as being the 'way forward' in terms of gaining a true picture of the welfare state of farm animals on every farm. The instigation and funding by the European Commission of a multi-million Euro project – 'Welfare Quality'[11] – which ran from 2004 to 2009, was aimed at developing a comprehensive methodology for assessing welfare outcomes on farms across the EU, and provided tangible evidence of the profile now held by this concept. During 2009, the RSPCA joined with Bristol University and the Soil Association to develop a wide-ranging and comprehensive plan for a five-year project[12] with the dual aims of: a) integrating welfare outcome assessment into the Freedom Food and Soil Association farm assurance schemes and b) rolling out the protocol to other assurance schemes in the UK and elsewhere in Europe. This work has the potential to revolutionise not only the nature and efficacy of farm assurance initiatives, but also our ability to understand and cater for the welfare needs of farm animals.

- A huge, complex global issue with the potential to have wide-ranging and significant effects on the welfare of farm animals has grown in profile and significance in the last five years, namely the whole issue of climate change. A vast amount of activity and research in this area has been and continues to be undertaken, but the fact that the results and subsequent 'advice' emanating from this work are often conflicting, non-specific or in some cases, speculative, serves to heighten awareness of the huge difficulties that may face livestock welfare and production in the coming years, not least as a result of potential conflicts that may arise between protecting animal welfare and protecting the environment.

Photographs: Andrew Forsyth/RSPCA Photolibrary

FOOTNOTES AND REFERENCES

1 Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.
2 The Welfare of Animals (Transport) (England) Order 2006; The Welfare of Animals (Transport) (Scotland) Regulations 2006; The Welfare of Animals (Transport) (Wales) Order 2007; The Welfare of Animals (Transport) (Amendment) Regulations (Northern Ireland) 2007.
3 *Paying the Price: The facts about chickens reared for their meat.* 2005. RSPCA.
4 Council Directive 2007/43/EC.
5 Freedom Food is the RSPCA's farm assurance and food labelling scheme. It is the only UK farm assurance scheme to focus solely on improving the welfare of farm animals reared for food.
6 Council Directive 1999/74/EC.
7 *The case against cages: Evidence in favour of alternative systems for laying hens.* RSPCA, 2005
8 Range enhancement for laying hens – University of Bristol.
9 www.calfforum.org.uk
10 Farrowing crates are restrictive pens in which the sow is placed from shortly before giving birth until weaning around four weeks later, and which prevent the sow from turning around. They aim to reduce the risk of the sow crushing her newborn piglets but seriously restrict her movement and natural behaviours.
11 www.welfarequality.net
12 www.bristol.ac.uk/news/2010/6961.html

Welfare indicator: The number of animals transported live from the UK for slaughter and further fattening

RSPCA concern

The transport of live farm animals from the UK to other countries for slaughter or further fattening is a process that is both unnecessary and fraught with risk to animal health and welfare.

Firstly, the travel is essentially unnecessary, as animals could be fattened and slaughtered in the UK and their meat exported instead. In addition, exported animals are taken on potentially long and complex journeys (involving both land and sea travel), which are governed by legislation that does not adequately protect their welfare. The law fails to take proper account of scientific research and practical experience relating to animals' needs in areas such as journey length, space allowance and temperature/ventilation. There are also indications that enforcement of legislation may not be adequate in some countries. In addition, some animals exported for further fattening may be sent to rearing systems that would be illegal in the UK, and/or provide conditions that fall below standard UK practice, further strengthening the welfare-related case for retaining animals in the UK for rearing.

The RSPCA advocates that all animals should be slaughtered as close as possible to where they are reared, with the frequency, duration and complexity of any travel minimised, and the quality of the transport process as a whole optimised.

THERE HAS BEEN LITTLE CHANGE OVER THE PAST FIVE YEARS.

Background

Scientific evidence[1] indicates that transport can result in serious health and welfare problems for farm animals. Livestock are subjected to a series of unfamiliar experiences and conditions, inevitably resulting in some degree of stress. Dehydration, thirst, hunger, heat and cold stress, inability to rest comfortably, injury and even death may occur in transit, especially when journeys are long, if the animals' needs are not properly satisfied in terms of provision of food and water, appropriate temperature, humidity and ventilation, enough space and bedding, and effective monitoring by accompanying hauliers/attendants. Poor driving technique, such as cornering too quickly or braking too hard, also has a major effect on welfare, leading to falling and injury[1] especially when space allowance is inappropriate[2]. Animals can become ill after travel due to a suppressed immune system resulting from stress[1], whilst animals already suffering from disease during transport can become more 'infective' when stressed, so are more likely to transmit illness to others in transit[3].

The journey complexity is also important. Journeys involving more than one loading/unloading process, and/or different modes of transport, such as those undertaken during export from the UK, clearly add to the potential for stress, distress and injury, with the loading and unloading processes being particularly challenging to some species.

It has also been recommended – on the basis of research – that some young animals, such as calves under four weeks of age, should not be 'marketed' at all due to their inability to cope adequately with all the physical and mental challenges posed by the transport and associated processes[4].

Current EU legislation on live transport[5] is implemented in the UK through the Welfare of Animals (Transport) (England) Order 2006. However, the law fails to protect adequately the welfare of farm animals in transit. For example, it fails to take account of research indicating how much space farm animals need, what maximum travel times and feed/water intervals should be for different species and ages of animal, and appropriate temperatures and humidity. Poor enforcement of the law in some countries, as evidenced by the European Commission's own inspection body, the Food and Veterinary Office (FVO)[6], as well as by the findings of investigations undertaken by other bodies including the RSPCA[7], adds to the likelihood of welfare problems occurring.

Table 1: **Number of live farm animals exported from the UK for slaughter or further fattening, 2000–2008**

	Number for fattening	Number for slaughter	Total number
2000	Not available	Not available	752,150[A]
2001[B]	Not available	Not available	109,316
2002[C]	Not available	Not available	130,048
2003	61,931	6,682	68,613
2004	41,622	6,826	48,448
2005	Not available	Not available	37,104
2006[D]	192,383	338,205	530,588[E]
2007[F]	155,422	305,156	460,578[G]
2008[H]	145,614	300,046	445,660
2009[I]	77,531	359.554	437,085[J]

Data source: Defra website, except for 2006 (see point D below), 2007 (see point F below) and 2009 (see point I below).

A – Includes 1,230 pigs.
B – In 2001, exports only took place during January and part of February, due to the ban imposed following the outbreak of Foot-and-Mouth Disease (FMD).
C – In 2002, live exports did not resume until July following the end of the FMD outbreak.
D – Data obtained from answer given by the Minister of State for Defra in answer to a parliamentary question – Hansard: HL Deb 17 July 07, cWA9.
E – Includes 128,028 cattle (122,028 of which were for further fattening), 289,529 sheep (70,335 went for further fattening) and 113,031 'other' livestock (20 of which were for further fattening).
F – Data obtained from Defra via a Freedom of Information Act request, July 2008. Defra's source quoted as the EU Commission TRACES database.
G – Includes 167,252 cattle (147,719 of which were for further fattening), 205,622 sheep (7,668 of which went for further fattening) and 87,704 other livestock
(namely pigs and goats, 35 of which went for further fattening).
H – Data obtained from the response to a Parliamentary Question by the Minister of State for Defra – Hansard: HL Deb 17 March 2009 c1016W.
I – Data obtained from Animal Health via a Freedom of Information request.
J – See Table 2 for species-specific details.

The indicator figures

The number of live animals transported from the UK has been reported by Defra (Department for Food and Rural Affairs) on its website for a number of years. The figures were obtained from sailing reports made by State Veterinary Service (now called Animal Health) staff. However, mid-2006 onwards these figures have no longer been available on Defra's website. The figures quoted in this report (for 2007, 2008 and 2009) have been obtained either via a parliamentary question (2008 figures) or via a Freedom of Information Act disclosure request to Defra (2007 and 2009 figures)[8 9]. However, as the source (government) was essentially the same as that from which previous years' figures were obtained, it has been assumed that it is reasonable and meaningful to make a direct comparison between the figures.

Unsurprisingly the figures show that live exports fell sharply following the Foot-and-Mouth Disease outbreak in 2001, with 2005 levels being only five per cent of those in 2000. This could indicate that alternatives were sought and successfully developed for the livestock (primarily sheep) that were no longer being transported overseas.

Slaughtering animals in the UK and exporting the meat instead is already the way in which the vast majority of lamb is exported. The negative effect of transport-related stress and injury on meat quality is well documented[10]. Hence, the export of meat

Table 2: **Number of live cattle, sheep, goats and pigs transported from the UK to other countries during 2009 (2008 figures in brackets)**

Livestock type	Number for fattening	Number for slaughter	Total number
Cattle and calves	7,066 (84,484)	7,347 (17,597)	14,413 (102,081)
Sheep	65,083 (58,416)	347,643 (256,447)	413,025 (314,863)
Goats and pigs	5,063 (2,714)	4,564 (26,002)	9,647 (28,716)
Total number	**77,212 (145,614)**	**359,554 (300,046)**	**437, 085 (445,660)**

Data source: Animal Health

instead of livestock is a positive approach in terms of both animal welfare and product quality, lending further incentive to achieving complete phasing out of live exports for slaughter and further fattening.

The figures show a very significant increase in the number of cattle exported live from the UK during 2006 – from zero in 2005 to 128,028, the vast majority of which (122,028) went for further fattening. It is reasonable to assume that this was primarily due to the resumption of the trade in live calves to Europe for veal production, following the lifting in May 2006 of the 10-year ban on UK bovine exports imposed due to high levels of BSE (bovine spongiform encephalopathy) in the UK.

The demand for these mainly dairy-bred calves in veal producing countries such as the Netherlands, coupled with an unfavourable UK market for these animals and a poor economic situation in the UK dairy industry, resulted in an immediate rekindling of an active trade as soon as the ban was lifted. The veal crate system, in which calves were reared in small, barren individual pens, was banned throughout the EU from January 2007, and it is thought that most veal producers had already converted to group housing systems by the time the UK calf exports resumed in May 2006. However, concerns about the conditions in which the calves are reared in Europe remain due to continuing discrepancies between EU legislation and UK law, as well as between common UK industry practice and systems used on the continent. The resumption of the trade in live calves to veal-rearing systems abroad halted the previously encouraging decline in total live exports for further fattening noted over several years up to 2006. This steady fall had indicated that alternative outlets may have been developed and utilised for some animals, and hence that the process of live export could indeed be successfully replaced. However, it is also clear that for a number of years, many dairy bull calves have been killed on-farm at an early age (e.g. around 150,000 in 2007 according to Agriculture and Horticulture Development Board [AHDB] estimates[11]) – due to difficulties in finding a market for them in the UK. This added further incentive to look for practical solutions to the live calf export trade that would satisfy all stakeholders and improve animal welfare and led to the formation of the Beyond Calf Exports Forum, initiated in 2006 by the RSPCA and Compassion in World Farming, which brought together all the major stakeholders with involvement or interest in the issue, including the food and farming industries, livestock welfare research scientists and government. The reasons behind the trade in calves are complex and the aim of the forum has been to develop financially and practically viable alternatives to the live calf export trade that can help to ensure dairy-bred calves remain in the UK for rearing.

Three sub-groups explored potential ways forward in three key areas:

i) identifying opportunities for developing new markets for beef and veal from male dairy calves in the UK
ii) identifying the barriers (and potential solutions) to developing a sustainable (in welfare and commercial terms) dairy cow in the UK
iii) investigating the question as to how to ensure acceptable levels of welfare for male dairy calves during rearing in the UK, particularly looking at the options put forward by the two other sub-groups.

The forum completed its initial work at the end of 2007, and produced a report[12] setting out clear recommendations as to the way forward.

Progress has continued, with some highly positive and potentially very effective initiatives being put in place by several major UK retailers aimed at encouraging and sustaining the utilisation of dairy bull calves within the UK beef market[13]. Facilitating the use of sexed semen to produce calves of the desired gender, and linking their dairy suppliers directly with their beef suppliers, are two such processes initiated by food retailers.

Comparison between the live export figures for 2009 and those of the previous year indicate that the total number of animals exported live from the UK in 2009 for further fattening or slaughter fell slightly (by around 8,500) compared with 2008. A fall is seen in both categories, and continues the trend seen in the past three years, a drop in total live exports of 70,000 having been noted between 2006 and 2007, and 15,000 between 2007 and 2008. However, whilst far fewer cattle, pigs and goats were transported overseas in 2009 than the previous year, almost 100,000 more sheep were exported (413,025 in 2009 versus 314,863 in 2008) particularly for slaughter purposes (347,643 versus 256,447 respectively). The reason for this is unclear, but is concerning from an animal welfare viewpoint. It also raises questions relating to possible reputational risk to the British sheep industry, in view of the known public concern about the export of live animals. In contrast, there were far fewer live cattle and calves exported from the UK in 2009 compared with the previous year, the overall fall being around 86,000 (i.e. 14,413 versus 102,081).

Cattle exports for slaughter and for further fattening both fell, though the latter category saw a much greater drop (from 84,484 in 2008 to 7,066 in 2009). It is highly likely that this reduction was due, at least in part, to the continuing fall in demand since 2008 for UK animals from major veal calf importers such as the Netherlands, as a result of concerns about bovine TB in the UK herd. However, it is also worth noting that several of the initiatives resulting from the work of the Beyond Calf Exports Forum (see above) are now taking effect, and could also have been responsible for the retention of greater numbers of dairy calves in the UK for beef production. Although the rise in sheep exports is disappointing, the decline in transport overseas of other species coupled with the on-going efforts of the Calf Forum members, lead the RSPCA to believe that it will still be feasible for the export of live animals for slaughter or further fattening to cease within the next few years. This would avoid the many associated risks to welfare faced by livestock during the export process and in some cases, subsequent rearing and/or slaughter overseas. It would also increase the potential of the British livestock industry to 'add value' to its products by slaughtering and processing them here, and obtaining due recognition for the quality of the products they produce. The farming industry's reputation could also be enhanced by avoiding the public concern often generated by the live export trade. The RSPCA is keen to see significant improvements in content, implementation and enforcement of European legislation relating to live transport as a whole, particularly with regard to reduced journey times, greater space allowances, stricter temperature requirements and crucially, more resources allocated to monitoring and enforcement in all member states. At the time of writing, discussions are ongoing at the level of the European Commission about amending EU live transport regulation. The RSPCA will be pressing the Commission to ensure that the key welfare-related issues previously mentioned are included in that review, in the hope that legislation and enforcement that more effectively protect animal welfare in transit will result. This would avoid the many associated risks to welfare faced by livestock during the export process and in some cases, subsequent rearing and/or slaughter overseas.

FOOTNOTES AND REFERENCES

1 European Commission Scientific Committee on Animal Health and Animal Welfare report: The welfare of animals during transport (details for horses, pigs, sheep and cattle). March 2002.
2 Jones T A, Wait C and Dawkins M S. 2010. Sheep lost balance, slip and fall less when loosely packed in transit where they stand close to but not touching their neighbours. *Applied Animal Behaviour Science* 123, 16–23.
3 Kent J E and Ewbank R. (1986). The effect of road transportation on the blood constituent and behaviour of calves. II. One to three weeks old. *British Veterinary Journal* 142, 131–140. Kent J E and Ewbank R. 1986. The effect of road transportation on the blood constituent and behaviour of calves. III. Three months old. *British Veterinary Journal* 142, 326–335.
4 Knowles T G. (1995). A review of the post-transport mortality among younger calves. Veterinary Record 317, 406–407.
5 Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.
6 For further information on the FVO, including its reports on implementation and enforcement of live transport law in EU countries, see: http://ec.europa.eu/comm/food/fvo/index_en.htm
7 Standing room only – science and suffering in European live animal transport. Chapter 3. RSPCA 2003.
8 HC Deb 17 March 2009 c1016W.
9 HC Deb 29 April 2008 c285W.
10 Gregory N G. 1998. Animal Welfare and Meat Science, CAB International.
11 The Agriculture and Horticulture Development Board (AHDB) is a NDPB (non-departmental public body) established under the Agriculture and Horticulture Development Board Order 2008. It became operational on 1 April 2008. www.ahdb.org.uk
12 Beyond Calf Exports Forum: Report on Conclusions and Recommendations, January 2008.
13 www.calfforum.org.uk/reports_and_papers.

Welfare indicator: The production of UK non-cage eggs as a proportion of total eggs produced

RSPCA concern

More than half of UK egg laying hens, about 17 million birds, still face a life in battery cages that do not meet their welfare needs[1]. Conventional barren battery cages are to be banned from 2012[2], however, so-called 'enriched' battery cages will still be allowed. Enriched cages provide a minimum of just 50 square centimetres extra usable space (about the size of a beer mat) for each hen compared to conventional cages, and limited facilities. Evidence indicates that neither conventional nor enriched cages adequately satisfy the birds' physical or behavioural requirements[1].

The RSPCA believes that all hens should be kept in properly managed free-range or barn systems[3], which can provide hens with much higher standards of welfare compared with cages[1], and would like to see 100 per cent of UK eggs being produced in cage-free systems.

THERE IS AN INCREASE IN THE PROPORTION OF NON-CAGE EGGS PRODUCED OVER FIVE YEARS.

Background

There are several key welfare issues relating to laying hens.

Space allowance

Hens naturally carry out numerous basic comfort behaviours, such as feather ruffling, head scratching, body shaking, wing stretching and flapping. Insufficient space in both types of battery cage (conventional and enriched) prevents the birds from properly carrying out these behaviours. In contrast, free-range and barn systems allow free movement of hens over a large area so that they can move away from other birds, increase bone strength and gain access to all the different facilities without difficulty[1].

Dustbathing

Dustbathing is an important physical and behavioural requirement for laying hens, enabling them to preen and recondition their feathers as well as helping to maintain a comfortable body temperature. A scratch area is provided in enriched cages, but the RSPCA believes that the scratch area is not only restrictive in space, but cannot provide the appropriate substrate for adequate dustbathing. In free-range and barn systems, hens are provided with enough space as well as access to litter in which they are able to dustbathe when and where they choose[1].

Egg laying

Hens are extremely motivated to gain access to a suitable nest site in which to lay their eggs and will perform complex pre-laying behaviours[1]. Currently enriched cages provide only one small nest space in each cage and birds will be forced to compete for this site each day. In free-range and barn systems there is considerably more nest area available compared to enriched cages, giving the hens plenty of opportunity to gain access to, and spend appropriate time in, the nest site of their choice[1].

Perching

Depending on the positioning of perches in enriched cages, it may be difficult for birds to perch undisturbed or move around the cage. In free-range and barn systems hens are able to freely use perches that do not detract from the overall floor area[1]. In less than two years' time once this is published, the European Directive on the protection of laying hens will be implemented in full, which will mark the end of conventional battery cages

throughout Europe. Producers will then have the choice of using barn or free-range systems or enriched cages in which to keep hens for egg production.

The RSPCA would like to see all cages banned and converted to non-cage or 'alternative' systems, compliant with the RSPCA's welfare standards for laying hens[4]. In support of this, research has shown that some barn systems can offer a financially comparable alternative to the cost of installing enriched cages[1]. Evidence also shows that the vast majority of UK caged egg producers will have written off their existing conventional cage equipment costs and will be ready to invest in new equipment by 2012 irrespective of the Directive[5].

The indicator figures

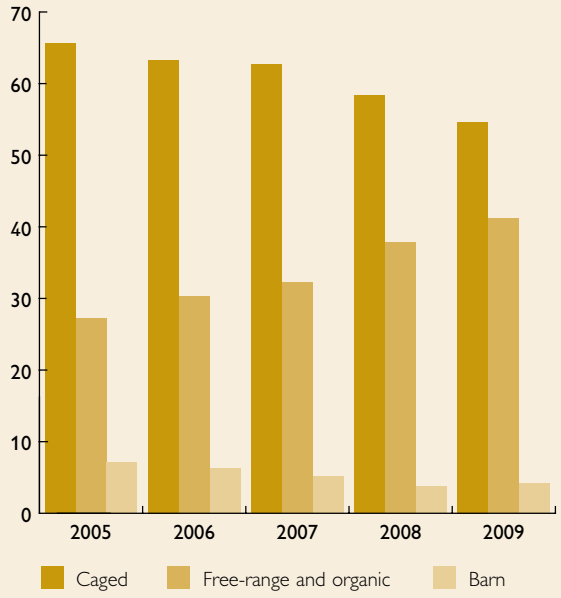
Data on the number of eggs produced in the UK, according to the method of production, is collected by Defra every three months. The data is based on egg packing throughput surveys for all class A eggs (suitable for retail) and is widely quoted by the egg industry and other relevant organisations. Numbers are given for cage, barn and free-range (which includes organic) eggs. These production figures give a picture of the UK egg market and provide a general indication of the welfare of hens by determining what proportion of the total number of eggs are produced in higher welfare systems compared to cages. From these figures changes in the use of different methods of production over a period of years can then be analysed. Since 2006, the number of organic eggs produced has also been collected. Any trends in the use of this type of production system over successive years will be apparent when there is enough data. The majority of class A eggs will be found on supermarket shelves and so an indication of the influence of consumer choice on the supply of eggs from different systems of production can also be gained from changes in the number of eggs produced.

In 2009 approximately 30 million hens in the UK produced 8,862 million class A eggs. The percentage of eggs produced in each system was as follows.

- Cages: 55 per cent.
- Free-range: 41 per cent (of which four per cent were organic).
- Barn: Four per cent.

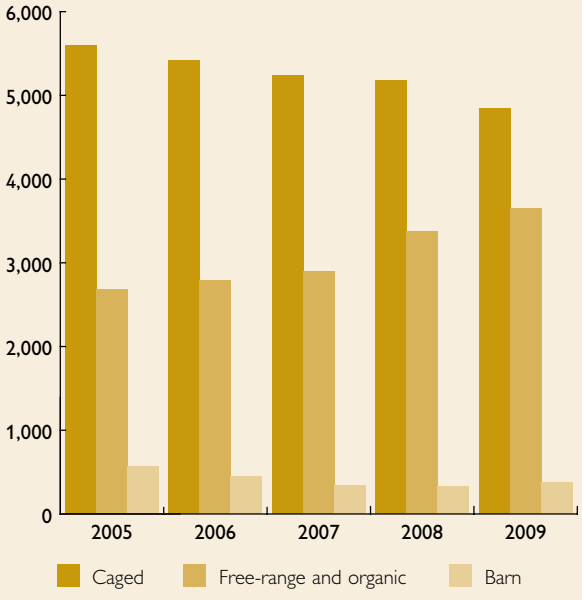
The proportion of eggs produced in non-cage systems compared to cage systems has increased by three per cent compared to 2008. This is another significant rise, following last

Figure 1: Eggs produced in different systems as a percentage of total annual egg production, 2005–2009



Data source: Defra.

Figure 2: Number of eggs produced in different systems in millions, 2005–2009



Data source: Defra.

year's four per cent increase. In terms of actual numbers of eggs, non-cage have increased by nearly nine per cent since 2008 while the number of cage eggs has decreased by seven per cent.

Consumer pressure and significant changes to retailer policy can help to explain the rise in non-cage eggs, which has continued with strength despite the economic downturn. For example, throughout 2009 Morrisons worked towards phasing out boxes of own-brand cage eggs, winning them the British Free Range Egg Producers Association 'Retailer of the Year' award in December. Morrisons completed this move in March 2010, following similar successful changes made in recent years by the likes of The Co-operative and Sainsbury's. In terms of using eggs as ingredients, Debenhams, Little Chef, Starbucks Coffee, John Lewis, Virgin Trains and 22 councils, were all winners of Compassion in World Farming's 'Good Egg Awards 2009'[7].

At the beginning of 2009 it was reported that free-range eggs represent 56 per cent of the market share[6] and further changes in the positive direction of higher welfare are hoped to continue in the next few years. Again, retailer policy will help to push this forward, with Sainsbury's committed to using only free-range eggs as an ingredient in all own-brand products by 2012[8], following along the same lines as Marks & Spencer and Waitrose. The impact of the impending 2012 ban on conventional cages is also likely to make a significant mark, with some producers choosing to end cage egg production and some deciding to keep hens in barns or free-range systems rather than 'enriched' cages.

Over the last five years, there has been a continuing trend towards higher welfare egg production. In 2005, 37 per cent of class A eggs in the UK were produced in free-range or barn systems, totalling 3,249 million eggs, compared to 5,601 million cage eggs. By 2009 the proportion of non-cage eggs produced had increased by eight per cent. In the same period, annual cage egg numbers had decreased by 14 per cent, while the number of non-cage eggs has increased by nearly a quarter (24 per cent). The trend over the past five years is shown in Figures 1 and 2.

Data from the first six months of 2010, which places the proportion of non-cage eggs at 49 per cent, suggests that we could very soon be looking at UK free-range and barn egg production finally overstepping the halfway mark.

The RSPCA believes that increasing future alternative egg production requires government to take the lead concerning transparent information for consumers buying eggs in any form, that is whole or as an ingredient. Whilst it is encouraging that eggs in the UK are increasingly to be produced in cage-free systems, millions of hens are still being kept in cages that do not meet their welfare needs.

The RSPCA would like to see 100 per cent of UK eggs being produced in cage-free systems.

FOOTNOTES AND REFERENCES

1 *The case against cages: Evidence in favour of alternative systems for laying hens*. 2005. RSPCA.
2 The Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens currently requires that conventional battery cages be phased out by 2012.
3 The vast majority of alternative egg production systems in the UK are Freedom Food approved, inspected to RSPCA Welfare Standards.
4 www.rspca.org.uk/farmanimals
5 *Coming of age: The age structure of UK caged egg production facilities*. 2006. RSPCA.
6 www.thegrocer.co.uk/articles.aspx?page=articles&ID=196590
7 www.thegoodeggawards.com
8 *The Ranger*, February 2009.

Welfare indicator: The number and proportion of meat chickens reared to higher on-farm welfare standards

RSPCA concern

In the UK, the average annual consumption of chicken meat exceeds that of any other type of meat[1]. Consequently, meat chickens (broilers) are by far the most numerous farm animals reared for meat in the UK (about 847 million each year, on average) accounting for approximately one-third of total meat production[1].

The welfare issues faced by many chickens can be particularly severe. The fast growth rates of broilers combined with management practices that do not provide chickens with a good level of care can contribute to major welfare problems being experienced by today's meat chicken. However, the application of higher welfare standards can effectively and significantly contribute to improved chicken welfare[2].

The RSPCA would like all chickens to be reared to higher welfare standards in line with those developed by the Society.

THERE IS A LARGE INCREASE IN THE NUMBER AND PROPORTION OF CHICKENS REARED TO HIGHER WELFARE STANDARDS.

Background

Owing to the number of animals involved and the severity of the welfare issues that can be encountered, the number and proportion of chickens reared to higher welfare standards is an important welfare indicator to monitor. There are currently four key issues that can have a significant effect on the welfare of meat chickens. One of the issues – growth rate – concerns the bird itself, whereas the other three issues relate to the management of the birds.

Growth rate

Meat chickens have been genetically selected to grow very quickly. In production terms, genetic selection for fast growth has been very successful: the time from when the birds first hatch to appearing on the supermarket shelves can be as little as five weeks. However, it has been reported that fast growth rates can contribute not only to the most severe but also the majority of the welfare problems seen in today's chickens. For example, rapid growth can contribute to the development of leg problems, ascites (a heart and circulatory problem) and sudden death syndrome (heart attack)[3].

Stocking density

Stocking density refers to the amount of space allocated to each bird and is expressed as bird weight per square metre. High stocking densities can impair welfare directly through movement restriction and indirectly by, for example, contributing to poor litter and air quality[3]. It has been reported that when stocking densities exceed 30kg (e.g. 15 x 2kg birds) per square metre there is a steep rise in the frequency of serious welfare problems[3]. For example, at high stocking densities, the prevalence of lameness and skin diseases can substantially increase. High stocking densities also make it more difficult for birds to perform their natural behaviours[3].

Lighting

Welfare problems can arise at light intensities below 20 lux[3]. At low light intensities birds are less active, which can contribute to the development of lameness and contact dermatitis. At very low light levels, birds can develop eye abnormalities[4]. Meat chickens may also be reared under a near-continuous lighting regime, i.e. have a very short dark period, as keeping the lights on encourages the birds to feed for longer periods, which maximises their growth rate. Preventing meat chickens from having a proper dark period for rest adversely affects their welfare[5].

Table 3: **Summary of key differences in on-farm welfare standards between ACP and RSPCA standards 2009**

Key welfare issue		ACP standards (the chicken industry's own standards)	RSPCA standards (as used by Freedom Food)
Average genetic growth rate (g/bird/day)		No restriction	Maximum 45
Stocking density in house (kg per square metre)		Above 38 permitted	Maximum 30
Lighting	Intensity	Minimum of 10 lux	Minimum 100 lux over 75% of floor area and 20 lux over remaining 25%
	Uninterrupted period of darkness	Minimum four hours – except first seven and last three days whereby birds can be provided with no dark period	Minimum six hours – except first seven and last three days whereby minimum two hours
	Natural lighting	No requirement	Required by 1 January 2010
Environmental enrichment		No requirement	Straw bales, perches and pecking objects

Data source: ACP and RSPCA.

Environmental enrichment

A more stimulating, i.e. enriched, environment encourages birds to be more active, which can help reduce leg and skin problems[3]. Chickens provided with an enriched environment are more active. For example, chickens provided with straw bales walk and run more, and sit down less than those kept without any form of enrichment[6].

Chickens can be raised either indoors or with access to the outdoors, e.g. free-range, but their welfare is primarily affected by the standards they are reared to rather than the system they are kept in. Most chickens are reared according to the standards developed by the UK chicken industry's own assurance scheme – Assured Chicken Production (ACP). However, chickens can be reared to higher welfare standards, such as those developed by the RSPCA, which are implemented by Freedom Food, the Society's own farm assurance scheme. Table 3 compares the RSPCA's Welfare Standards for Chickens[7] with those of ACP[8] for the key issues affecting chicken welfare on the farm.

In addition to ACP standards, some supermarkets also require some or all of their suppliers to produce indoor-reared chickens to standards that the supermarket has set itself, which can be higher than those set by ACP. The Co-operative's Elmwood Chicken, Marks & Spencer's Oakham Chicken, and Waitrose Essential Chicken are all subjected to some higher welfare standards when they are on the farm, compared to those chickens reared to ACP standards alone. Such chickens are referred to as 'standard plus' – these chickens are often provided with natural light, environmental enrichment and more space compared to 'standard' chickens, i.e. chickens reared to ACP standards only. However, although the 'standard plus' standards cover some important welfare concerns on the farm, they do not meet the requirement for slower growing breeds as specified within the RSPCA standards, which we believe is a fundamental issue to address in terms of substantially improving chicken welfare. Therefore, whilst 'standard plus' birds are reared to higher on-farm welfare standards compared to those reared to ACP standards only, they do not meet all the higher welfare standards of the RSPCA, as used by Freedom Food.

The retail of 'standard plus' chickens is a fairly recent phenomenon: Waitrose launched their 'standard plus' line in September 2006, whilst Marks & Spencer and The Co-operative launched their equivalent 'standard plus' lines in May and October 2007, respectively. But it was Tesco that was the first retailer to launch a 'standard plus' line, in June 2006, which was known as Tesco Willow Farm Chicken. However, in September 2008, Tesco upgraded all their Willow Farm Chicken range to Freedom Food.

In July 2010, the Council Directive[9] laying down minimum rules for the protection of chickens kept for meat production came into effect across the European Union (EU). It is the first piece of legislation specifically concerning the welfare of indoor-reared broilers and will bring some common standards for the treatment of meat chickens across Europe. Disappointingly, the Directive does not address the very serious welfare issues associated with the fast growth rates of broilers and also permits producers to stock chickens at 42kg (e.g. 21 x 2kg birds) per square metre – a density that is unacceptable to ensure a satisfactory level of chicken welfare is achieved. However, each EU member state, when

Table 4: **The approximate number and proportion of meat chickens reared in the UK to higher on-farm welfare standards and to the chicken industry's own standards (ACP), 2005–2009**

Standard/system	Total number of birds reared (million)					Proportion of total (%)				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
ACP[a]	827.51	814.09	719.00	664.74	671.12	96.1	95.2	85.2	80.10	79.40
Standard plus	–	–	69.39	91.79	98.93	–	–	8.2	11.1	11.7
RSPCA (indoor)[b,d]	22.69	25.14	35.65	50.70	49.62	2.6	2.9	4.2	6.1	5.9
RSPCA (free-range)[c,d]			8.70	4.40	10.37			1.0	0.5	1.3
Free-range[e]	9.38	13.77	8.48	15.42	12.91	1.1	1.6	1.0	1.9	1.5
Organic[f]	1.22	1.84	2.74	2.63	2.63	0.1	0.2	0.3	0.3	0.3
Total	860.80	854.84	843.96	829.68	845.58	100				

A – Commercial broiler chick placings in the UK from UK and non-UK (i.e. imported broiler chicks) hatcheries. Due to calculations, figures also include a small number of chicks reared as free-range and organic or to standards other than ACP. Data from Defra[11].

B – Chickens reared indoors to RSPCA welfare standards and within the Freedom Food scheme.

C – Free-range chickens reared to RSPCA welfare standards and within the Freedom Food scheme.

D – Data supplied by Freedom Food Ltd. Chickens reared to the RSPCA standards and not within the Freedom Food scheme have not been included. For years 2005 and 2006, the number of chickens reared indoors and as free-range have been combined and therefore only one figure is presented. RSPCA welfare standards can be applied to all systems of production, i.e. indoor and free-range, including organic.

E – Does not include free-range chickens reared to the RSPCA's standards and within the Freedom Food scheme. Data supplied by three largest UK free-range producers, which represent the majority of the UK free-range market and do not exclusively rear their birds to RSPCA standards. This data is not collected centrally by any organisation.

F – Data from Defra[12]. Data collected by organic certification officers during annual on-farm inspections. Data therefore represents number of chickens on farm at that time and not the total throughput of animals during the year.

transposing the Directive into their country's law, can choose to set legal standards that go higher than that within the Directive. In December 2009, England and Wales provisionally decided on how to transpose the new EU legislation into law and, basing their decision on welfare science, opted not to include the highest stocking density that the European legislation allows for. Instead, they provisionally set the maximum stocking density at 39kg (e.g. 19.5 x 2kg birds) per square metre (at the time of publication the English and Welsh legislation had not been agreed). This stocking density is still above that of current UK industry standards[8] (Table 4), which do not allow producers to plan to stock chickens at more than 38kg per square metre and is considerable higher than that of 30kg per square metre which the RSPCA believes to be the maximum level at which good welfare can be achieved. The issue of fast growth rate still remains unaddressed.

The indicator figures

The approximate number of meat chickens reared in the UK to higher welfare standards[10] and to the chicken industry's own standards (ACP) is shown in Table 4.

Between 2005 and 2008 there was a steady annual decline in the total number of meat chickens reared in the UK (down 31.1 million, Table 4). Over the same period, there was a year-on-year reduction in the number of chickens reared to ACP standards (down 162.8 million), but, in general, a steady increase in the number of chickens reared to all other standards (up 131.7 million) (Table 4). However, from 2008 to 2009, the total number of meat chickens reared in the UK increased by 15.9 million (1.9 per cent), with the majority of these (9.52 million, i.e. 60 per cent) being reared to standards higher than those of ACP.

For the period between 2008 and 2009, there was an increase in the number of chickens reared as 'standard plus' (up 7.14

million, 7.8 per cent), 'standard' (up 6.38 million, one per cent) and RSPCA free-range (up 5.97 million, 135.7 per cent) and a decrease in free-range (non-RSPCA) (down 2.51 million, 16.3 per cent) and RSPCA indoor production (down 1.08 million, 2.1 per cent). No change was seen for organic production. Compared to 2008, the proportion of birds reared to standards higher than ACP in 2009 increased from 19.9 to 20.6 per cent of the total market. Therefore, in 2009, one in every five chickens produced in the UK was reared to welfare standards higher than those of ACP.

In 2009, 56.7 per cent (55.7 per cent in 2008) of chickens reared to standards higher than ACP were reared to the individual supermarkets' own higher welfare standards, i.e. 'standard plus'. This was followed by those chickens reared to the RSPCA standards (34.4 per cent) (33.4 per cent in 2008), then those reared as free-range only (7.4 per cent) (9.3 per cent in 2008) and then organic (1.5 per cent) (1.6 per cent in 2008). Free-range production represented 2.8 per cent (23.3 million birds) (2.4 per cent, 19.8 million birds in 2008) of the total market and 13.4 per cent of the higher welfare market in 2009. Of all the free-range birds reared, 44.5 per cent (22.2 per cent in 2008) were reared to RSPCA standards.

Over the last five years (2005–2009, inclusive), the total number of broilers reared in the UK decreased by 15.2 million birds (from 860.8 to 845.6 million, 1.8 per cent) (Table 4). This decline was entirely due to a reduction in the number of broilers being reared to ACP standards (down 156.4 million, 18.9 per cent). ACP production represented 79.4 per cent of the total market in 2009 compared to 96.1 per cent in 2005. Consequently, the number of birds reared to standards higher than ACP increased dramatically, rising from 33.3 to 174.5 million (up 141.2 million, 424 per cent), occupying a total market share of 21.6 per cent in 2009 compared to 3.8 per cent in 2005. The largest increase in this sector over this period was seen in the development of 'standard plus' chicken, which went from zero to 98.9 million chickens and also chickens reared to RSPCA Freedom Food standards, which increased from 22.7 to 60.0 million (up 37.3 million, 164.3 per cent). Free-range and organic production also increased by 3.5 (37.3 per cent) and 1.4 million (114.8 per cent), respectively, over this time.

The RSPCA believes that the significant media attention on the production of chickens, especially during 2008, and continual public campaigning by welfare organisations has helped with the rise in the proportion of meat chickens reared to higher welfare standards over the last five years. In January 2008, Channel Four aired a number of programmes that looked at how chickens are reared. TV chefs Jamie Oliver and Hugh Fearnley-Whittingstall both presented programmes that put the spotlight on the rearing of chickens. *Jamie's Fowl Dinners*[13] demonstrated the reality of 'how chickens live and die to put food on our plates'. *Hugh's Chicken Run*[14] challenged the realities of intensive farming with Fearnley-Whittingstall setting up and managing a free-range and an intensively reared chicken unit. Around 12.4 million people watched the two programmes. An opinion poll[15] commissioned by the RSPCA demonstrated that 61 and 45 per cent of those questioned had watched Jamie's Fowl Dinners and Hugh's Chicken Run, respectively. The same poll[15] showed that 79 per cent agreed that animal welfare is an important consideration when buying chicken.

In 2006[16] and 2008[15], 72 per cent of people stated that they usually buy higher welfare chicken that is labelled Freedom Food, free-range or organic. However, in 2006, just over two per cent of chickens produced in the UK were reared to such higher welfare standards, and although this increased to nine per cent in 2009, there is still a large discrepancy between what people say or believe they are buying and the actual production figures. This could be due to a number of factors, such as: inadequate, misleading or no labelling; price (higher welfare chicken can be more expensive than 'standard' chicken); a difficulty in finding higher welfare products and/or a lack of availability or choice.

The RSPCA welcomes the increase in the number of chickens reared to on-farm welfare standards that are higher than those of ACP, but would like to see all meat chickens reared to welfare standards that are at least equivalent to those of the RSPCA's Welfare Standards for Chickens, which set requirements concerning the genetic growth rate of the birds as well as their environment.

The RSPCA would welcome the collection and publication of data on the number of chickens produced under the different methods of production.

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Welfare indicator: Piglet mortality levels between birth and weaning

RSPCA concern

Around 11 million piglets are born on UK farms every year[1]. However, a substantial number will die before weaning at about 27 days of age[2]. The average mortality rate is influenced by a number of factors, including the animals' environment, health care, management, nutrition and genetics of the mother (sow) and/or piglets. It is reasonable to assume that in many cases, the deaths of these piglets will have been preceded by a period of suffering, with the nature, degree and duration of suffering dependent on the cause of death and, potentially, the time of death; whether it occurred in utero, during the farrowing process or post farrowing.

The RSPCA therefore believes that a reduction in the levels of pre-weaning piglet mortality would clearly be an important development in pig welfare.

THERE HAS BEEN LITTLE CHANGE OVER THE PAST FIVE YEARS.

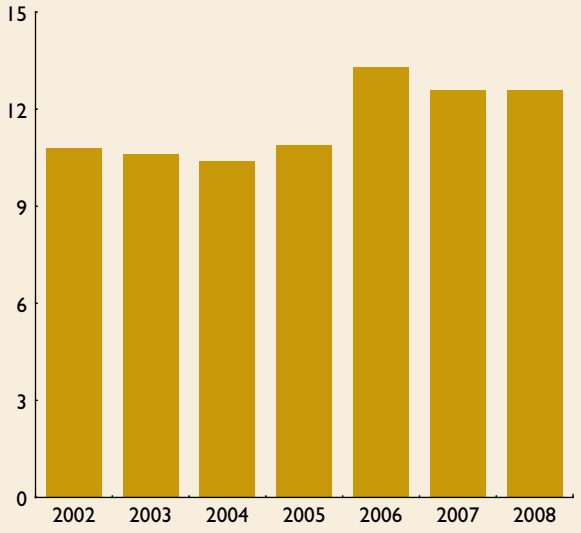
Background

Much research has been carried out investigating the causes of pre-weaning mortality, with the predominant cause dependent on the production system in use. On outdoor units, where sows farrow loose in individual huts, a significant proportion of deaths result from overlaying or crushing by the sow[3]. Factors that contribute to the likelihood of crushing are numerous and include breed or genetic-related differences in the mothering behaviour and ability of sows[4], the genetics of the male (boar), and the age and condition of the sow[5]. On indoor units, where farrowing crates predominate, starvation, savaging and scouring are more common causes of pre-weaning mortality. In addition, farrowing time is often longer in farrowing crates[6], which has been shown to result in the sow, or at least her uterine muscle tissue, becoming tired. This increases the risk of neonatal death, particularly of the last two to four piglets, for which the likelihood of death is approximately 50 per cent[7 8]. A few years ago, a nutritional supplement was developed for sows during farrowing which reportedly cuts stillbirths and neonatal mortality, mainly due to a reduction in farrowing time[7 8].

For both types of production, providing optimum nutrition during gestation and lactation is an important measure to help boost piglet birthweights and therefore survival; the risk of mortality in live-born pigs falls for piglets weighing 1.4kg or more[9]. The thermal environment is also important, particularly on indoor units; insulated accommodation, drying and warming the piglets immediately after birth, the provision of straw and extra heat (including floor heating) during farrowing, and fan ventilation as opposed to natural ventilation are all associated with reduced piglet mortality[5 10 11]. Research is also being conducted to investigate the possibility of using thermal cameras to identify piglets suffering from hypothermia in the first few days after farrowing[12]. This would allow the prompt and appropriate treatment of weak newborn piglets, improving their chances of survival.

Stock-keeper input can also have a considerable affect on piglet mortality, with mortality being reduced by up to half when the stock-keeper is present during farrowing[5 13]. This is presumably as a result of increased detection of problems during farrowing and therefore a higher level of intervention when problems arise. Techniques and equipment are currently being developed to aid the detection of imminent farrowing and thus alert the farmer for supervision[12]. Additionally, checking of the sow and her piglets twice a day, as opposed to once a day is associated with higher piglet survival rates[5], whilst the level of

Figure 3: **Average mortality levels (%) from birth to weaning of piglets born alive in the UK**



Data source: *BPEX Pig Yearbook 2009.*

fearfulness of sows towards their stock-keepers has been shown to affect both the length of time a sow takes to give birth and pre-weaning piglet survival; higher fearfulness being associated with higher death rates[14]. This illustrates the importance of positive, considerate handling and stockmanship in order to ensure that the pigs have trust in and lack of fear towards their stock-keepers.

There may also be a seasonal effect on pre-weaning mortality. Recent data has indicated lower levels of pre-weaning mortality occurring in the summer and winter with small peaks occurring in the spring and autumn[15].

Pre-weaning mortality is usually defined as the percentage of piglets that are born alive per litter that die prior to weaning. This is the figure that is reported in this report and previous versions. However, the percentage of those piglets that are born alive but die prior to weaning does not reflect the total number of potentially viable piglets that die. Stillbirths (0.63 piglets per litter in 2008[2]) are the most common cause of death on indoor units[16]. Such deaths are not usually captured in data on pre-weaning mortality, thus total mortality (pre-weaning mortality plus those born dead) may, in fact, be a more useful welfare indicator. Not only do those piglets born dead represent a waste of life, we do not know at what stage of the farrowing process they died and whether their death was associated with pain and/or suffering. Such data is difficult to capture, particularly on commercial farms, however, it would provide a more valuable measure.

The indicator figures

Unfortunately, the most recent data (2009 figures) used for this indicator was not published in time for inclusion in this year's publication. The last year for which data are available is 2008, in which pre-weaning mortality levels were reported to be 12.6 per cent[2], meaning that 1.3 million piglets died before weaning during that year[1].

In 2005, pre-weaning mortality levels were around 11 per cent[17], representing the deaths of around 1.2 million piglets before weaning[18], so in the four years leading up to 2009, not only has the level of pre-weaning mortality increased slightly, but so has the number of piglets dying in absolute terms. This increase may be partly explained by the fact that in the same period the number of piglets born alive per litter increased from 10.8[7] in 2005[17] to 11.23 in 2008[2]. This is to be expected as larger litter sizes usually lead to smaller and therefore more vulnerable piglets[19], which are more likely to be crushed by the sow[20].

In previous reports, since 2006, the RSPCA has been calling for an annual reduction in the average level of pre-weaning mortality of one per cent. Practical experience indicates that significantly lower piglet mortality levels are achievable on some farms. Pre-weaning mortality levels are more than two per cent lower in the top 10 per cent of farms compared to the average[2], so there is clearly the potential for improvement. Therefore an annual reduction of one per cent is still a realistic aspiration. If achieved, this would result in a fall in pre-weaning mortality levels from just under 12.6 per cent (in 2008)[2] down to just over seven per cent by the end of 2013, a drop that would prevent the deaths of approximately 1.6 million piglets[21] over that period. Such a reduction would be of benefit both to the pig industry in economic terms and, most importantly, to pig welfare.

Clearly, more needs to be done to try and achieve this despite some progress already being made. Anecdotal reports from the industry and pig breeding companies suggest that breeding goals are beginning to change, from litter size to parameters associated with survivability. It is interesting to note the Danish industry has changed the focus of their breeding goals from "total born piglets" to "live piglets day five" to reflect the fact that it is the number of piglets that survive rather than the number born per se that is important[6]. It will clearly take some time for this research and development to be rolled out across the industry and for these

SINCE 2006, THE RSPCA HAS BEEN CALLING FOR AN ANNUAL REDUCTION IN THE AVERAGE LEVEL OF PRE-WEANING MORTALITY OF ONE PER CENT.

breeding strategies to be translated into reduced mortality at farm level.

In the UK a new initiative by the British Pig Executive (BPEX) was launched in early 2010 to try and increase production within the UK pig industry[22]. The Two Tonne Sow campaign aims to help English producers achieve an industry average of 2,000 kg of pig meat per sow per year by 2012. Whilst a number of production parameters will be focused on, including the performance of finishing pigs, a key aspect will be sow performance. It is important that the number of piglets born alive is not the only measure considered, and that pre-weaning mortality is also taken into consideration. It will be interesting to see what impact this campaign may have on pre-weaning mortality levels in the years to come.

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Welfare indicator: The number, nature and outcomes of Animal Health[1] inspections of farms and livestock markets

RSPCA concern

The welfare of animals in the UK on farms and at livestock markets is governed by specific legislation. While the RSPCA believes that in a number of areas the law fails to protect farm animal welfare adequately, it does at least provide a baseline standard which all are required to achieve. Monitoring of the implementation of animal welfare legislation and ensuring its enforcement are, therefore, of considerable importance, and must be undertaken effectively – in terms of both quantity and quality of inspection. Similarly, the government issues codes of recommendation for the welfare of livestock that aim to set out 'best practice' in terms of the care of farm animals. Ascertaining the degree to which the codes are followed across the farming industry can, provide a general indication of the overall welfare state of farm animals in the UK.

The RSPCA believes the government must allocate increased resources to its farm animal welfare inspection (in terms of number and nature of inspection visits) of farm animal holdings, to ensure that legislation relating to livestock welfare is being implemented across the country, and that some of the important animal welfare conditions that are not presently recorded become an integral part of the veterinary surveillance programme in the future.

THERE HAS BEEN LITTLE CHANGE OVER THE PAST FIVE YEARS.

Background

Animal Health is an executive agency of the Department for Environment, Food and Rural Affairs (Defra) and it also works on behalf of the Scottish Executive, Welsh Assembly Government and the Food Standards Agency. Animal Health succeeded the State Veterinary Service in 2007[1]. It is described on the government's website[2] as: "...the government's executive agency primarily responsible for ensuring that farmed animals in Great Britain are healthy, disease-free and well looked after."

The agency is the official inspection body acting on behalf of Defra, the Scottish Executive Environment and Rural Affairs Department (SEERAD) and the Welsh Assembly Government. A significant part of its work involves undertaking visits to livestock premises to ascertain the level of compliance with, and undertake enforcement of, UK legislation relating to farm animal welfare on farms. This includes the Animal Welfare Act 2006 which sets out the general requirements for looking after all animals, and is supplemented by the detailed requirements set out in the Welfare of Farmed Animals [England] Regulations 2007 and at livestock markets (primarily the Welfare of Animals at Markets Order 1990 and amendments).

Compliance with government Codes of Recommendation for the Welfare of Livestock, is also checked. Failure to achieve the 'codes' is not in itself a legal offence, but can be used as evidence of falling below 'best practice' in the event of an animal welfare-related prosecution. Under the reformed EU Common Agricultural Policy, the outcome of checks by the inspection agency on 'cross compliance' with livestock welfare legislation has a bearing on the level of subsidy payments that may be received by a producer. Failures in cross-compliance can result in some of the payment being withheld.

Although in several areas, the RSPCA believes that current EU (and hence, for the most part, UK) farm animal welfare-related legislation fails to afford adequate protection to livestock, compliance with the law does at least help to ensure minimum standards of care.

Government Codes of Recommendation, which set generally higher standards, help to offer more protection. The work of the agency is, therefore, very significant on several counts. The data it generates can be extremely valuable in terms of providing information on the status quo regarding the level of compliance with welfare law and codes, and also of assisting in decisions on where best to focus efforts to bring about necessary improvements. The number of visits and hence the proportion of livestock holdings visited is obviously also significant if a truly representational picture of the welfare state of the UK's livestock is to be ascertained. Visits are undertaken on both a targeted and random basis, resulting not only from complaints but also from an elective process.

Table 5: **Number of visits and inspections undertaken by Animal Health on farms and at livestock markets, 2003–2008**

Year	2003	2004	2005	2006	2007	2008
Farms	2,817 (4,964)	3,149 (5,431)	3,349 (6,123)	3,834 (6,407)	3,978[a]	4,124 (10,165)
Markets	3,647 (8,735)	3,658 (8,719)	2,943 (7,293)	2,569 (6,706)	2,425 (6,113)	2,819 (7,087)

Data source: Defra: The report of the Chief Veterinary Officer – Animal Health 2003–2008.

Note: The number of inspections is the second figure, shown in brackets.
More than one 'inspection' may take place during a single 'visit' to one premises, for example if more than one species is held at the site.

A – Comparable figures for 'inspections' are not available for 2007. Welfare inspections on farm consist of up to 11 assessment criteria and the figures for the total number of assessments made for each criteria are now reported.

Indicator figures

The total number of farm animal holdings (premises with farm animals) in the UK is estimated as being about 300,000 (this includes a substantial number of holdings which could not be classed as commercial farms, but still have a holding number because they have a small number of farm animals at the premises)[3]. Table 5 shows that there has been a small but steady year-on-year increase in the number of visits to farms undertaken by SVS/Animal Health between 2004 and 2008. However, the figures also show that the maximum number of visits to farms by SVS/Animal Health in any one of the years 2004–2008 was 4,124, which represents a relatively small percentage of the total number of holdings. This contrasts with the coverage achieved by farm assurance schemes, a number of which visit every scheme member every year, and a few of which undertake additional visits. It is, however, the case that the number of farms involved in a single scheme is significantly lower than the total in the country so higher 'coverage' is clearly easier to achieve.

The total number of livestock markets in the UK is around 150[4]. On average, therefore, each market received nearly 19 Animal Health visits during 2008. The outcome of the visits made by Animal Health is also reported in the Defra Chief Veterinary Officer's (CVO) report. The outcomes are recorded as falling into one of four categories: A (compliance with legislation and codes); B (compliance with legislation but not codes); C (non-compliance with legislation); and D (unnecessary pain, unnecessary distress seen on the visit).

The data are presented in the form of graphs in the CVO's report, without the actual figures being stated, making it difficult to report exact information here. However, the following conclusions regarding the situation in 2008 can be drawn from the graphs presented in the 2008 report.

- Non-compliance with Codes of Recommendation is seen most frequently on pig, beef and sheep and goat farms. Overall:
  - around 40 per cent of assessments undertaken on pig, beef and sheep and goat holdings during complaint or targeted visits identified a failure to comply with the relevant codes, and around two per cent of the visits recorded that sheep and goats had been caused unnecessary pain and distress, though this figure was found to be only around 15 per cent on programme, elective and cross-compliance visits with no record of animals having suffered unnecessary pain and distress
  - the non-compliance figures for broilers were around 30 per cent (complaint/targeted and elective respectively), which was an improvement of around 10 per cent for the complaint/targeted visits, but was more than 10 per cent worse for the elective visits compared to the previous year
  - for miscellaneous poultry, the figures were nearly 40 per cent (complaint/targeted) and almost 15 per cent (programme/elective). Both figures are slightly higher than the previous year, possibly reflecting the increased number of small poultry keepers who had registered their holdings.

- Combining data relating to all species visited, non-compliance with codes found on complaint or target farm visits was most common in the areas of:
  - disease treatment (around 50 per cent non-compliance – no change on the previous year)
  - housing (around 50 per cent, showing no change on the previous year)
  - environment (about 48 per cent, compared with around 53 per cent the previous year)
  - records (48 per cent – 2007 was about 51 per cent)
  - staffing issues (about 48 per cent compared with more than 45 per cent in 2007)
  - freedom of movement-related (just over 20 per cent of cases, a similar figure to the previous year's findings).
- With regard to legislation:
  - an approximate 18 per cent failure rate in complying with requirements on keeping farm records was noted on complaint or target farm visits representing no change on the 2007 figure. This figure was found to be around five per cent on programme and elective visits, which was slightly less than the previous year
  - around a 12 per cent failure rate to comply with the law relating to disease treatment was noted on complaint and target visits, which illustrated no real change from the previous year (with no failures seen on programme/elective visits)
  - failure to adhere to legislation relating to animals' environments was noted in around 10 per cent of cases on programme/target farms, which was a slight improvement on the previous year (with no failures on programme/elective visits)
- about 10 per cent non-compliance with legislation on feed and water was seen on complaint and target visits, with some unnecessary pain and distress being observed as a result, which was about the same as the previous year (but no failures were seen on programme/elective visits).
- Overall, nearly 40 per cent of all assessments made on complaint or target farm visits identified a failure to comply with Codes of Recommendation for the welfare of livestock, representing no change from the previous year. Around 15 per cent on programme and elective visits noted codes non-compliance indicating a rise of around five per cent compared to 2007. Just under 10 per cent of assessments (complaint and target visits) noted non-compliance with legislation, a similar figure to 2007.
- At livestock markets, the most common areas of non-compliance with codes were those relating to:
  - feed and water (just under 30 per cent of assessments identifying failures – similar to 2007)
  - bedding (approximately 28 per cent – slightly up on the 2007 figure of 25 per cent)
  - care of unfit animals (just over 20 per cent, a small improvement on the 25 per cent noted the previous year)
  - loading onto/unloading from vehicles (around 11 per cent, continuing the downward trend of the previous year).

Generally, the incidence of non-compliance with legislation at livestock markets was reported as being very low, full compliance being recorded during 99 per cent of market inspections, which was the same as the previous year.

ANIMAL HEALTH SUCCEEDED THE STATE VETERINARY SERVICE IN 2007. IT IS DESCRIBED ON THE GOVERNMENT'S WEBSITE AS: "...THE GOVERNMENT'S EXECUTIVE AGENCY PRIMARILY RESPONSIBLE FOR ENSURING THAT FARMED ANIMALS IN GREAT BRITAIN ARE HEALTHY, DISEASE-FREE AND WELL LOOKED AFTER."

These data indicate some encouraging improvements in 2008 compared with the previous year in a number of areas relating to SVS/Animal Health findings on farms and at markets regarding compliance with law and codes. There are, however, a number of areas where little if any progress has been made. Similarly, the number of visits undertaken by the agency has increased only slightly, with visits only covering a relatively small percentage of holdings with farm animals. This makes it difficult to accept the outcome of Animal Health visits as truly representative of the situation across the whole livestock farming industry.

However, other developments during 2007 relating to the qualitative side of the Animal Health's work have been encouraging. In its Business Plan for 2007–2008, the agency stated that it intends to: "Establish an Inspections Programme, to analyse critical inspection points and on-farm activities and develop consistent risk-based inspections". From 1 January 2007, its work included inspections to check cross-compliance with animal welfare Statutory Management Requirements as part of EU Cross-Compliance Regulations. The risk model has been specifically developed and implemented for the purpose of allocating these inspections. In addition, the agency has previously stated that it is working with government to help develop government policies that are: "both deliverable and focused on outcomes", an important development if the welfare of livestock is to be effectively assessed and, where necessary, improved. The RSPCA would like to see a more outcomes-based approach to farm and market inspections, in which a formal assessment is made not only of the resources (in terms of environment, feed and water etc.) provided, but also the end result in terms of the animals' health and welfare.

Whilst acknowledging that there have been some improvements compared to 2007, the nature of the information contained in the report still does not allow us to meaningfully evaluate the health and welfare of herds and flocks within the UK. For example, the Animal Health report 2008 informs us about adherence to legislation and the codes, but provides little, if any, information which would allow us to understand the level of mastitis in the dairy herd, or lameness in the national sheep flock. These conditions are often very painful, and affect the welfare of a significant number of animals. The RSPCA believes it is unacceptable that Animal Health does not routinely record the incidence of these conditions, and publish its findings in the annual report of the CVO. It is a prime example of an outcome-based measure.

FOOTNOTES AND REFERENCES

1 In April 2007, the State Veterinary Service (SVS) merged with various other bodies involved in overseeing aspects of the livestock farming sector and wildlife, and the resulting agency was named Animal Health.
2 www.defra.gov.uk/animalhealth
3 Defra (National Statistics) June Survey of Agriculture and Horticulture, published 18 December 2008.
4 Source: Livestock Auctioneers Association: www.laa.co.uk and the Institute of Auctioneers and Appraisers in Scotland: www.auctioneersscotland.co.uk July 2008.