



25th August 2020

Rt. Hon. Lord Goldsmith of Richmond Park
Minister of State
DEFRA
Nobel House
17 Smith Square
London
SW1P 3JR

Dear Lord Goldsmith

Beak treatment – Second biennial report of Laying Hen Welfare Forum

We welcome the opportunity to provide you with the second biennial update on the progress being made by the Laying Hen Welfare Forum (LHWF) and the wider industry to reduce injurious pecking (IP) in flocks of laying hens. IP ranges from gentle feather pecking to severe feather pecking, vent pecking and cannibalism. If left unchecked, it could lead to substantial feather loss, serious injury and death. It occurs in all production systems. To prevent IP, the vast majority of UK laying hens are routinely beak trimmed as day old chicks¹. The aim is to get to a stage where injurious pecking has been reduced to such an extent that beak trimming is no longer necessary.

Background

The LHWF was established in 2015 and brings together expertise from industry, farm, veterinary, animal welfare and government to explore how flock management can be improved, and to work with producers to reduce injurious pecking amongst laying hens. Through practical studies, the group is seeking to establish economically positive ways of improving the welfare of laying hens and pullets. The LHWF will promote knowledge transfer to the wider egg industry to include both commercial and small flocks. It will endeavour to encourage adoption of best practice by all, including facilitating producers to share effective innovative practices.

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¹ In the UK, the beaks are subject to Infra-Red Beak Treatment, which is a procedure carried out on day-old chicks in a hatchery and involves focusing a high intensity infra-red beam at the tip of the beak. Approximately 2-3 weeks later the tip of the beak falls off. IRBT is non-invasive and replaced 'hot-blade' beak trimming (of birds less than 10 days of age), where up to one-third of the upper and lower mandible of the beak were cut and cauterized.

Following the Ministerial decision to approve the recommendation in the Beak Trimming Action Group's (BTAG) review that the industry was not ready to ban beak trimming in 2016, the LHWF was tasked with progressing the work to reduce IP and mortality in the sector with the aim of reaching a point in time where beak trimming would no longer be necessary. Members of the Operational Group of the LHWF are listed in Annex A and the recommendations of BTAG are shown in Annex B.

Our first biennial update was provided to Lord Gardiner in February 2018 and included the progress made in response to the recommendations of the BTAG report.

In this update we have set out: the current position on feather cover and reducing IP and mortality in laying hens; what the LHWF is doing to further reduce such incidences; and provide a proposed action plan on the longer-term aim to obviate the need to treat the beaks of day-old chicks using 'Infra-Red' technology. We have also included updates from the global genetic breeding companies, nutritionists, and from the British Veterinary Poultry Association, on their continuing efforts to reduce IP.

Executive summary

- Injurious feather pecking (IP) and resultant poor feather cover remains a major welfare and production issue in laying hen flocks, which is influenced by bird genetics, nutrition, the environment (in which birds are housed / have access to) and management
- In order to advance understanding of the factors associated with, and to find interventions to reduce IP, a 2.5-year EIP grant funded² project on 'Maintaining feather cover in laying hens' was completed in Spring 2020
- The principal aim of the project was to build on practice and science-based evidence to test the best support approaches for commercial implementation and uptake of strategies aimed at reducing IP in laying hens
- This was accomplished by utilising existing knowledge from social science on Motivational Interviewing (MI) by the experienced research team, in order to facilitate producer ownership over maintaining feather cover by the development and implementation of bespoke Feather Cover Action Plans (FCAP's) and other interventions
- Overall a substantial 80% of producers made changes to their management and added additional resources
- While some changes were inexpensive, for example providing enrichments such as rope, plastic objects or balls in the house, others were capital investments like verandas and/or time-consuming actions such as planting trees on the range, which indicates producers' commitment to tackle this issue
- Nearly two thirds (62%) of the birds in all 29 project flocks had good feather cover at all ages when measured (age range 17 – 82w)
- With support and sufficient motivation and engagement, FCAP's could successfully be implemented on laying hen farms

² RDPE, European Innovation Partnership (EIP) grant; 106330 'Maintaining Feather Cover in Laying Hens'.

- Barriers to implementing planned changes were few, but included financial and time constraints and having insufficient information to decide whether the change, given the cost, would bring sufficient benefits
- As Knowledge Exchange (KE) was a key part of the project, multiple routes of sharing information were utilised including; workshops and/or presentation and discussion events; articles published in the poultry industry press; videos to bring the actions on farm 'to life'; the LHWF website and social media platforms
- Study tours were undertaken by LHWF members to the Netherlands and Austria, which mainly run non-beak trimmed flocks (i.e. no beak trimming of day-old chicks). Whilst not directly comparable to production in the UK, the visits did provide useful insights, in particular the importance of synchronicity between the rearing and laying environments and the benefits of verandas in free range units. There were challenges in transitioning to running non-beak trimmed flocks in terms of increased mortality, worse feather cover (which UK consumers would not accept) and a shortening of the production cycle
- It has been suggested that UK producers should switch to using white genotypes, which are claimed to be easier to manage without beak trimming, but which produce white eggs. However, the sector is led by market (consumer) demand. In the 1970's brown became the egg colour of choice, which was seen as 'rustic' / 'farm produced', with white eggs seen as 'industrial'. Today, the few white flocks produce for the egg processing sector. The small proportion of white eggs which are marketed at retail level are to the Jewish community and as an entry-level egg in one multiple retailer. Previous trials at retail level with white eggs promoted as a premium brand failed to change consumer buying habits
- Breeding companies cannot commit to a date in the future when the sector can expect commercially available laying hens that will no longer show a propensity to IP, but they continue to work towards this aim. The process on selection criteria is complex, detailed and very difficult to execute and therefore not straight forward for prolonged life of individuals kept in groups. As heritability's of welfare traits are generally known to be fairly low, genetic improvements take time and flock management such as nutrition, housing, adaptation of rearing to production circumstances, etc., are other key factors to incorporate³.
- From a nutritional perspective, there has been widespread recognition of the benefits of increased fibre in diets in relation to feather cover and bird behaviour. The use of higher fibre diets has been adopted across a significant proportion of the industry and the use of supplementary fibre sources such as lucerne bales are often used as enrichment
- Veterinarians take a holistic approach to improving layer health and welfare, of which reducing IP is an important factor. The British Veterinary Poultry Association (BVPA) would wish to carefully assess how successful the suggested interventions are in reliably reducing IP and maintaining feather cover to acceptable levels before recommending that producers consider routinely placing non-trimmed flocks
- Assurance schemes, such as the British Lion Quality Scheme and RSPCA assured, continue to record data on mortality and feather cover which is used to provide a benchmark for producers to continue to make improvements
- Going forward, the LHWF will continue to collect further outcome data from the trial flocks which will be used to assess the overall benefits of the FCAP project

³ See Annex C for Genetics section of BTAG report

- The next phase for the LHWF is to deliver the training and resources needed for vets to adopt MI approaches, with the longer-term aspiration and aim to embed the FCAPs into veterinary visits and the 'Veterinary Health and Welfare Plan' (VHWP) if they are proven to be effective
- The LHWF is also developing a training package to be able to roll out the FCAPs to the wider industry in conjunction with and using the field staff of breeders and packers, as well as feed company representatives. We will then hopefully start to see the widespread improvement in feather cover necessary before any move to non-trimmed beaks
- Mortality in non-trimmed flocks across all production systems is higher (27%) than those which are infra-red beak treated. The environmental, welfare and economic consequences of higher mortality should be addressed before any further move to running non-beak trimmed flocks
- It would be beneficial if grants could be made available for producer and stockperson training, and financial incentives given to recognise those maintaining well-feathered flocks
- We are developing a new workstream concentrating on the synchronicity between rear and lay, given its importance
- As it remains our primary consideration to continue to safeguard the welfare of laying hens at all times, we are not yet in a position to provide a date when we believe we can cease Infra-Red Beak Treatment (IRBT) without the very real possibility that bird welfare would suffer and the associated reputational damage that would follow.

EIP Grant-funded project on 'Maintaining feather cover in laying hens'

In order to advance our understanding of the factors associated with, and to find interventions to reduce IP in laying hens, the LHWF applied for and obtained EIP grant funded support for a project on 'Maintaining feather cover in laying hens' (February 2018 – August 2020). We enclose a copy of the comprehensive report made to the RPA.

To assist in the project, we recruited a Project Research Officer (PRO) for the period of Funding, although a delay resulted in the project commencing in April 2018). We also successfully completed the recruitment of 29 trial farms, which were commercially representative in size across all systems of production.

One of the principal aims of the project was to examine the feasibility of developing and implementing a Feather Cover Action Plan (FCAP) which was bespoke to each trial farm and was co-developed with the PRO. Their implementation and any welfare outcomes were measured for 26 flocks⁴ which were available for a second visit to the trial farms. Some of the key findings included:

- Almost all (80%) of producers made changes to their management and added additional resources
- While some changes were inexpensive, for example providing environmental enrichment such as rope, plastic objects or balls in the house, others were capital investments such as verandas and/or time-consuming such as planting

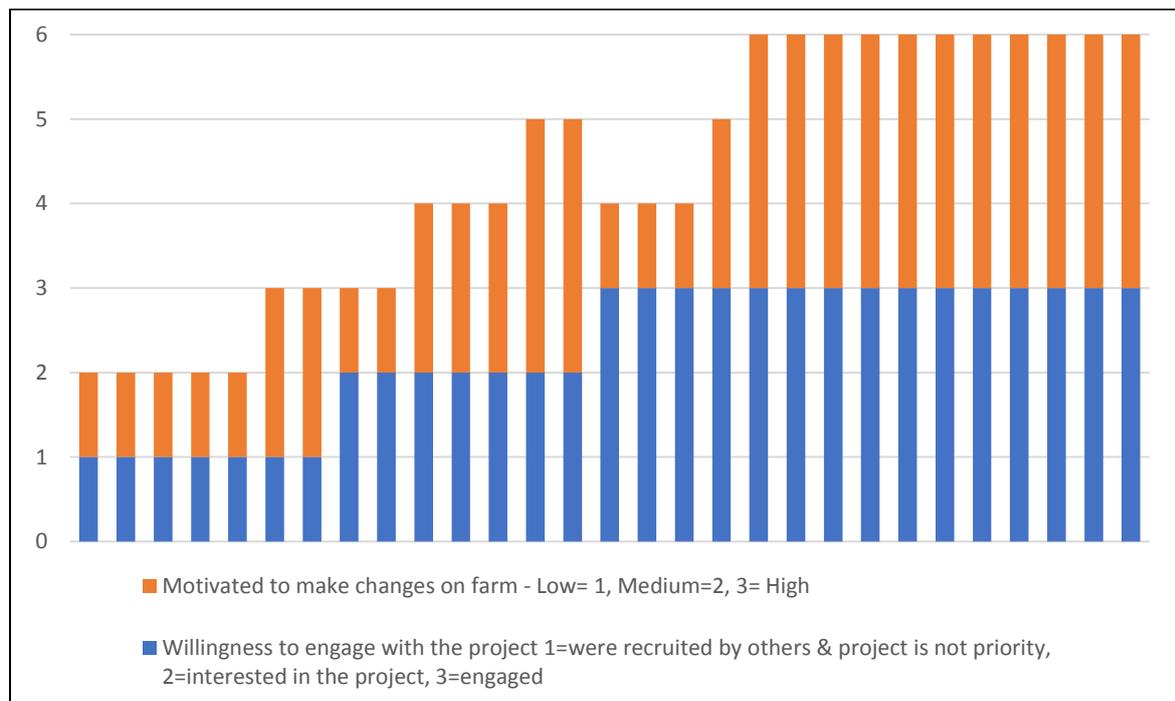
⁴ Welfare outcomes were measured at the 1st and 2nd visit for feather scores and mortality. Three flocks were not available for a second visit due to disease challenge on farm, change of ownership and late recruitment.

- trees, renewing and strategically placing artificial shelters to encourage ranging, continually replenishing lucerne or removing capped litter
- While most producers adopted validated ideas new to their farm, a few tried innovative approaches e.g. a trial of pecking rings in an enriched colony cage system to determine whether they could assist in keeping non-trimmed birds. This action demonstrated the willingness of the producer to trial potential solutions, but unfortunately did not help to maintain feather cover compared with control birds in the same house.

The project used an innovative Motivational Interviewing (MI) based facilitation approach with the aim that the co-created, bespoke FCAP's could deliver reduced feather pecking on farms. That is, focusing less on telling producers what they need to do and more on listening to and building on what they had already achieved and their own aims regarding maintaining good feather cover. Undoubtedly the support of an experienced, trained facilitator with in-depth knowledge of managing feather cover was a major factor in these levels of achievement, being able to harness and maximise the willingness of producers to improve feather cover.

Importantly, the high adoption of planned changes was independent of the number of strategies to manage feather cover already in place at the start of the project. This also indicates that, with support and sufficient motivation and engagement, FCAPs could successfully be implemented nationally. However, if this is to be an addition to the flock Veterinary Health and Welfare Plan (VHWP), the associated costs will need to be explored and accounted for.

Figure 1. Levels of producer motivation to plan changes to manage feather cover, compared with initial levels of engagement (data gathered at 1st visit)



In listing the sources of advice, producers pointed to their veterinary adviser as being one of a number of trusted partners. Engaging vets in this approach as advocates of feather cover management is considered to be of critical importance if FCAPs are to be rolled out to, and successfully implemented in, the wider industry. There is a need to use the vet as a preventative measure and not when there is a severe IP issue on farm which may require a mind-set change from both the vet and producer.

The project also indicated that key motivators for producers for the maintenance of good feather cover were, in order of importance:

- bird welfare
- productivity
- customer relations
- pride

To help achieve maintenance of good feather cover, producers' suggested incentives were grants for training, more on-farm trials and research, plus (financial) recognition for well-feathered flocks to offset some of the cost of implementing FCAPs e.g. enrichments, interventions, management strategies, training of stockpersons. Increased knowledge exchange (KE), supported by industry, was also perceived as valuable.

Reflecting on the value of their FCAP, producers recognised that being part of the project not only raised their awareness of IP and the importance of maintaining good feather cover but also motivated them to make changes to achieve this. They recognised the value of facilitator support and noted the motivational aspect whereby successful outcomes gave incentive to make further progress. Some producers regarded their bespoke action(s) from the FCAP had been successful in helping to reduce IP on their own farms. Other producers reported that some of the bespoke actions were not yet achieved by the second visit due to either financial and/or time constraints or had been planned for the next new flock.

KE was also a key part of the project, achieving high levels of engagement using many formats, focussing on preferences expressed by the producers for receiving information on managing feather cover. Accordingly, there were 7 workshops and/or presentation and discussion events with producer discussion groups, 5 more with a range of stakeholders and 7 articles published in the poultry industry press with more planned to share the project results. As videos are a preferred route for KE, given they bring the actions on farm 'to life', producer-led, professional quality videos filmed on commercial farms participating in the study were created. The video topics covered transition from rear, maintaining good litter quality, ideas for enrichments, a quality range and how to feather score. The videos have been shown at many of the workshops and poultry training programmes and have been well received with good feedback. The LHWF [website](#) was developed early in the project and now contains a comprehensive [resources](#) page of information for managing injurious pecking to maintain good feather cover. The site includes links to the videos and the well-used [Featherwel](#) website. The project also showed that producers preferred some social media platforms to others, with Twitter being the most popular.

Study group visits to The Netherlands and Austria

As the overarching aim of the LHWF is to support producers to manage IP and maintain good feather cover so that the industry can possibly move to managing flocks of hens with non-trimmed beaks, study tours were arranged to two countries which run mainly intact beak flocks to better understand how they are managing.

After visiting two laying farms, speaking to producers and the principal breed company, the visit to Austria during June 2019 indicated that the key factors in Austrian producers' ability to manage non-trimmed flocks were:

- receipt of higher egg prices in a small home market
- smaller, family-run farms (max 9.5k birds)
- winter-gardens (verandas) on all free range houses (which are grant funded)
- access for free range hens to the range was delayed until 26 weeks of age which allows birds to build up immunity (Please note this would not be allowed in the UK if eggs were to be marketed as free range. In the UK birds are required to have full daytime access no later than 21 weeks of age)
- bespoke rearing, matching rearing farm equipment with laying farm equipment as part of the integrated and supportive industry structure
- based around one main genotype in a national flock size of just 6.9 million hens.

The visit to the Netherlands during October 2018 demonstrated that:

- some producers were facing challenges managing intact beak flocks
- poorer feather cover in laying flocks is generally accepted by producers, regulators and consumers in NL. This would not be the case in the UK
- a move to white genotypes (which lay white eggs currently not preferred by UK consumers) was felt to be easier to manage with non-trimmed beaks (2018 data: 35% brown / 65% white birds)
- the first flocks managed without beak trimming saw average mortality rates increase from 5% to 9%
- high nutrient feed with at least 5% fibre was beneficial.

While both visits provided useful insights, there remain crucial differences between the UK and other countries. These include:

- UK has many more, larger, free range flocks and a higher population of FR hens (UK 25 million, Austria 1.7m and The Netherlands 5.8m)
- Brown birds are predominant in the UK, laying brown eggs which are preferred by consumers. Brown layers are more difficult to manage than white layers
- The Netherlands has higher mortality levels in non-trimmed birds
- The Netherlands experiences poorer feather cover, which would be unacceptable to UK producers, retailers and consumers (IP is partly controlled by dimming the lights in NL to low levels which would be unacceptable in the UK)
- As a result of higher mortality and poorer feather cover there is a higher 'environmental' cost of providing replacement birds, the associated additional feed consumption both for poorer feathered flocks and replacement birds, and disposal of prematurely dead birds.

Brown egg / white egg debate

It has been suggested that UK producers should switch to using white genotypes, which are claimed to be easier to manage without beak trimming, but which produce white eggs. However, the sector is led by market (consumer) demand and it is worth noting that while a mix of white/brown eggs were marketed to consumers in the 1970's, demand led to a near 100% switch to brown eggs, which were seen as 'rustic' / 'farm produced', with white eggs seen as 'industrial'.

Today, the few white flocks produce for the egg processing sector. The small proportion of white eggs which are marketed at retail level are to the Jewish community and as an entry-level egg in one multiple retailer. Other trials at retail level with white eggs promoted as a premium brand have failed to change consumer buying habits

Earlier this year one of the British Egg Industry Council (BEIC) / LHWF member organisations, the British Free Range Egg Producers Association, ran a limited campaign to encourage consumers to switch from brown to white eggs. However, a multi-million pound campaign would be necessary to firstly conduct detailed consumer research and then to promote white eggs. The industry does not have the necessary funds for such research / promotion.

It is also worth noting that the egg marketing legislation requires that eggs cannot be marketed as Class A if they have been cleaned or washed in any way. In other words, egg washing of shell eggs for retail sale is not allowed due to concern that, if not carried out correctly, any bacteria that were to be present on the shell can migrate inside the egg. By their very colour, white shelled eggs tend to show any dirt or other blemish, which can result in a higher proportion of downgrading to second quality eggs.

The EUs 'Farm to Fork' approach to food hygiene has successfully ensured that high standards are employed at every stage of production. In non-EU countries, the 'farm to fork' approach is not required, where standards can be lower during the production stages, but 'cleaning up' of the product takes place at the end – so-called 'end of pipe solution'. UK producers are naturally concerned that any future free trade agreements do not allow imports of eggs and egg products produced to sub-standard food hygiene and bird welfare.

Updates on genetics, nutrition and veterinary

In this section we have included updates received from the genetics breeding companies and nutritionists on the progress being made. The British Veterinary Poultry Association has also provided an update.

Genetics

Today, there are just three companies which supply the world's genetic breeding stock for egg laying – Wesjohann Group, Hendrix Genetics and Novagen. All are headquartered in Europe. In the UK, they are represented by: Hy-Line (UK) Ltd, Lohmann GB, H&N (Wesjohann Group): Joice and Hill Poultry Ltd (Hendrix Genetics): Novagen is currently not represented in the UK.

For background, we have included at Annex C the section on 'genetics' in the BTAG report.

Breeding companies have informed us that they cannot commit to a date in the future when the sector can expect commercially available laying hens that will no longer show a propensity to IP. The process for selection criteria is complex, detailed and very difficult to execute and therefore not straight forward for prolonged life of individuals kept in groups. This indeed can actually result in increased mortality in the next generation(s).

In order to properly take into account group behaviour under practical circumstances in the field, geneticists have their 'hands tied' to traits which are very difficult to record and collect and show very low heritability, implying that progress will be minimal and slow, regardless whether or not complex scientific genetic models are applied with or without additional genomics efforts⁵. This is especially the case keeping in mind the highly inquisitive nature of laying hens to explore their surroundings, including their group-mates, for which the only tool they have is their beak - either treated or untreated (with a sharp hook).

By way of example, one of the most popular breeds for non-trimmed organic production in the UK delivers good feather cover through their docile nature, bred over many years. It is, however, evident even in such non-trimmed flocks, that a 'trade-off' still exists with higher mortality. This 'trade-off' of increased mortality with non-trimmed flocks could potentially become a problem with other breeds on the market.

Geneticists do whatever they can to genetically improve the survival of the laying hens of the future in every single generation of selection, but still the impact of the environment remains greater than 80% of the total. The rearing of young pullets, the health-status of the flock, disease prevention and the supply of healthy, nutritious and constant high quality feed and water, together with overall sound management and good stockmanship are the most important success factors in the prevention of laying hen mortality and maintenance of good feather cover, both now and in the future.

The updates from the genetics breeding companies are shown in Annex D.

Nutrition

Nutrition is just one of a number of tools available to the producer to reduce IP and can be at times a blunt tool to address the vagaries of the environment, weather, and variable management. As such, it can only achieve so much.

The industry and scientific community understand that many factors contribute to maintaining feather cover. From a nutritional perspective there has been widespread recognition of the benefits of increased fibre in diets in relation to feather cover and bird behaviour. The use of higher fibre diets has been adopted across a significant proportion of the industry and the use of supplementary fibre sources such as lucerne bales are often used as enrichment in the laying house, but also standard practice in some rearing establishments. Nutritionists constantly strive to provide a balanced diet and maintain the gut health of birds so that they can fully utilise the nutrients provided. There has also

⁵ See Annex C for Genetics section of BTAG report

been more focus on the presentation of feed in terms of grit size although the science on this is less clear cut.

Pecking enrichments such as pecking blocks have also been developed by some feed companies, to keep the birds entertained within the poultry house and to help reduce beak sharpness.

Veterinary

“The British Veterinary Poultry Association (BVPA) continues to support individual veterinarians working with their layer clients on a feather cover action plan as part of annual veterinary health and welfare review to help reduce the incidence and damage associated with injurious pecking.

Veterinarians are aware of the negative health and welfare impact of poor feather cover in terms of precipitating secondary systemic and intestinal disease. BVPA actively supports all measures which will lead to improved feather cover. In addition, veterinarians are mindful of the government response to the BTAG recommendations in terms of reducing injurious pecking and in parallel obviating the need to routinely beak trim laying hens.

Veterinarians take a holistic approach to improving layer health and welfare, of which reducing injurious pecking is an important factor. The veterinary profession works closely with the poultry industry on red mite control, and the prevention of bacterial diseases including *E. coli*, *Erysipelas* and *Pasteurella*, through vaccination strategies and other biosecurity measures, against a background of antibiotic reduction.

BVPA is further encouraged by the preliminary outcomes of the research project recently completed by the industry-led Laying Hen Welfare Forum (LHWF), which has as an overarching aim to achieve nationwide uptake of evidence-based management strategies to control injurious pecking (IP) in laying hens. The BVPA fully supports the proposal that veterinarians contribute to this approach by delivering this via bespoke Feather Cover Action Plans (FCAP) added to flock health and welfare plans.

Furthermore, BVPA welcomes collaborative initiatives that improve the training and skills of veterinarians in delivering these aims, building on the LHWF’s research findings. However, going forward, BVPA would wish to carefully assess how successful the suggested interventions are in reliably reducing injurious pecking and maintaining feather cover to acceptable levels before recommending that producers consider routinely placing flocks with intact beaks”.

Current status of farm assurance scheme / organic certification body audits / inspections - Monitoring uptake of bespoke action plans

(As per Recommendation 4 of BTAG report).

BEICs ‘Lion Code of Practice’

In the previous biennial update, BEIC reported that appropriate intervention strategies from the list produced by the Bristol University ‘Feather Pecking Project’ had been

embraced by Lion Code egg producers⁶ (accounting for over 90% of UK egg production), with a high level of compliance.

The most recent data from 2,200 assessments carried out on Lion laying sites during 2018 and 2019 showed 99.7% compliance. During the same period there was 100% compliance on the 396 pullet rearing farms assessed (source: BEIC independent Lion Code assessments).

As part of the BEIC Lion Code of Practice, data is recorded on: cumulative mortality at 40 and 70 weeks of age (or earlier if the flock is to be depleted before 70 weeks of age); the reasons attributable, where possible, to the mortality; feather cover (using the AssureWel three point scale – see feather scoring guide in Annex E) at 40 weeks (+/- two weeks) and 70 weeks (+/- two weeks), or time of depletion if earlier. The Lion Code database, whereby BEIC Subscribers input the above data for all their registered egg producers, is to be used for benchmarking by individual packers and across the wider industry.

The latest figures from Lion Code producers are recorded as mean averages for mortality from the Lion flock’s database for 2019 for all flocks in all housing systems at 40 and 70 weeks, including culls (Table 1).

Table 1. Mortality and culls for Lion flocks at 40 weeks & 70 weeks of age in 2019

2019	40 weeks			70 weeks		
	Average mortality and cull rates %		Total number of Lion flocks used to calculate mortality and cull rates	Average mortality and cull rates %		Total number of Lion flocks used to calculate mortality and cull rates
	<i>IRBT</i>	<i>Untrimmed</i>		<i>IRBT</i>	<i>Untrimmed</i>	
All production systems	1.77	2.49	1,481	6.23	7.91	1,699
Enriched (colony) cage	1.86	3.18	99	4.59	6.29	124
Barn	2.84	<i>No data</i>	14	7.98	<i>No data</i>	16
Free Range	1.73	2.31	1,151	6.31	8.48	1,331
Organic	2.22	2.77	217	6.69	7.65	228

Note: data are collected from flocks aged 40 or 70 weeks during the calendar year and therefore relate to a mix of the same or different flocks/holding.

⁶ Lion Code of Practice (V7), Sections 5:15 and 6:15; ‘To reduce the risk of feather pecking and cannibalism, but particularly in non-beak trimmed birds, producers are recommended to be aware of and implement appropriate intervention strategies from the list produced by the Bristol University Feather Pecking Project’. The requirement is for 6 interventions.

(Guidance - ‘Auditors to check if Bristol University Feather Pecking Project document is available, and which intervention strategies are being implemented. The website can be found at www.featherwel.org’).

Mortality in non-trimmed flocks across all production systems is higher (27%) than those which are IRBT. This is an area of concern that needs to be addressed before any further move to running non-beak trimmed flocks.

Table 2. Data from Lion Code houses (flocks), giving beak status and average flock size by system (2019/20)

	Total houses (flocks)	Houses (flocks) IRBT	Houses (flocks) non-trimmed	Total number of birds housed	Total birds IRBT	Total birds non-trimmed	Average flock size IRBT	Average flock size non-trimmed
Barn	36	36	0	1,124,906	1,124,906	0	31,247	0
Enriched Colony	162	158	4	12,381,928	11,882,150	499,778	75,203	124,945
Free Range	2,059	1,956	103	24,154,506	23,272,613	881,893	11,898	8,562
Organic	434	39	395	1,446,784	142,311	1,304,473	3,649*	3,302*
All production systems	2,691	2,189	502	39,108,124	36,421,980	2,686,144	n/a	n/a

* Max organic flock size is 3,000 birds. Reason for higher figure is recording of more than one 3k bird flock in a house

Importantly, Table 2 shows that the average flock size for non-trimmed FR birds is 8,562 birds compared with 11,898 birds in an IRBT flock. Of the 881,893 FR birds (3.7% of total) that were non-trimmed, these are mainly less intensively selected breeds which produce special egg types supplying a premium niche market. Producers operating such flocks tend to receive a higher ex-farm egg price to reflect the increased cost of production. On the basis of the figures in Tables 1 and 2, if all flocks were to be run without beak trimming at this stage, mortality and culls would increase by over 655,000 birds per annum. In practice, managing larger commercial flocks is more challenging, therefore this figure is likely to be an underestimate.

Table 3. Mean feather loss scores (0 is good cover, 2 is poor) for Lion flocks at 40 weeks and 70 weeks of age (2019)

2019	40 weeks			70 weeks		
	Mean Feather Score		Total number of Lion flocks used to calculate Mean Feather Loss	Mean Feather Score		Total number of Lion flocks used to calculate Mean Feather Loss
	<i>IRBT</i>	<i>Untrimmed</i>		<i>IRBT</i>	<i>Untrimmed</i>	
All production systems	0.21	0.26	1,489	0.93	0.94	1,702
Enriched (colony) cage	0.26	0.00	100	1.19	1.00	124
Barn	0.14	<i>No data</i>	14	1.00	<i>No data</i>	16
Free Range	0.20	0.26	1,158	0.91	0.93	1,334
Organic	0.25	0.27	217	0.97	0.96	228

The figures in Table 3 are combined for both head and neck, and back and vent at 40 weeks and again combined at 70 weeks. In combining all the production systems, hens appear to have very little feather loss throughout lay. At 70 weeks enriched (colony) cages have more feather loss, some of which will be from natural abrasion (e.g. as birds access the feed trough), but average numbers are comparable for all systems.

It is though, important to put this into context. Whilst the data in Table 3 appears to show that there is no significant difference in feather score between IRBT and non-trimmed birds, as noted above all the FR non-trimmed flocks are small and involve less intensively selected breeds, with the associated higher cost of production, necessitating a higher return for the producer. We are aware that these high cost flocks can avoid beak treatment as has been seen during the BTAG work and in other countries across Europe. We now need to replicate this progress in large, low cost commercial FR flocks.

With economic pressures leading to an increase in FR flock size, producers have a real concern that running non-trimmed 'commercial' 16k bird flocks could lead to poorer feather cover due to IP and an increase in mortality.

Other assurance schemes

The LHWF is in contact with other assurance schemes (RSPCA Assured, Laid in Britain, Organic Farmers and Growers, Organic Food Federation and Soil Association). We are also exploring ways in which to ensure that the small percentage of non-affiliated and non-commercial hens are included.

The following responses have been received:

RSPCA Assured

“RSPCA Assured laying hen scheme members receive a feather score assessment (based on the AssureWel protocol) at every RSPCA Assured audit and every RSPCA Monitoring visit. The assessment includes a standardised and validated feather loss assessment, review of mortality records (mortality to date, at 40 weeks of age for the current flock where applicable, and at end of lay for the previous flock) and an assessment of flock flightiness and beak trimming quality among other welfare measures. Members are benchmarked against the whole scheme for mortality at 40 weeks of age and for feather loss (overall and severe).

AssureWel welfare assessments have been in place since September 2011. Benchmarking was introduced in November 2012. RSPCA Assured members are required to maintain a monthly record of feather loss (since September 2013) and this parameter is to be measured using the AssureWel protocol (since August 2017). Where feather loss falls below specified tolerance thresholds (based on AssureWel benchmarking data for the RSPCA Assured scheme), actions must be taken to reduce injurious pecking behaviour and records made of the action taken. These records must be reviewed as part of each farm’s Veterinary Health and Welfare Plan.

The RSPCA has also added that they are aiming to complete the main analyses of the years 6 to 8 (2017-2019) AssureWel data in the final quarter of 2020”.

A list of enrichments is contained in the ‘RSPCA standards for laying hens’ (August 2017). <https://www.berspcaassured.org.uk/media/1244/rspca-welfare-standards-for-laying-hens-august-2017.pdf>

Soil Association Welfare Assessment for Laying Hens

“The Soil Association has the following processes at inspection and guidance within its welfare standards. These include:

- Standards recommend that routine monitoring of the welfare of your animals using welfare outcome measures allows you to recognise problems and identify areas for improvement. Details and guidance are provided in using the feather loss assessment
- Standards detail that if a welfare problem occurs, where feather loss falls below given tolerance thresholds (based on AssureWel benchmarking data), prompt action must be taken, the effectiveness of which must be reviewed and the action altered if necessary. If a welfare problem is found at your inspection, then you must describe what steps you will take to resolve the issue in your Action Summary Form and it will be discussed at the following inspection
- Soil Association standards were revised in 2018 to include a new range quality and cover standard. The standard details that range must be of a suitable design and actively managed to encourage birds outside and to promote full and extensive use of the range
- Additionally, we are working in a targeted fashion with producers who are struggling to improve feather loss. Helping them to work through bespoke action plans and providing additional guidance and support.

Soil Association / Soil Association Certification continues to collect data on interventions as part of the AssureWel welfare outcome assessment protocol”.

Laid in Britain

“Laid in Britain accounts for approximately 3% of egg production. During 2019, approximately 60 sites were audited and were in compliance with the scheme’s requirements on feather cover.

Members have been kept up to date with all the Bristol University monitoring advice and recommendations. A record sheet has been provided to record feather loss (using the 0-2 scoring system), and foot scores at 30, 40, 50 and 60 weeks and a column for similar assessment to be made by the independent auditor at the time of the annual audit. There is also provision on the sheet to record any rapid increase in feather loss or cannibalism, with date and age. At this time, it should be recorded that the farm’s veterinary surgeon has been notified and details of what corrective action has been taken. LIB has tried to keep the record-keeping as stress-free as possible for producers, whilst still monitoring the aims of recording and improving feather cover. LIB Members are fully conversant with the strategies of the AssureWel and FeatherWel reports and have been asked to adopt those strategies which apply to their own units. LIB record all mortality”.

Organic Food Federation

“Federation policy is for inspectors to report excess feather loss that could have been caused by pecking. Any reference to pecking / feather loss in the inspector’s report will be taken up with the client and the inspector involved”.

Organic Farmers and Growers

“OF&G certify approximately two-thirds of the UK’s organic egg laying flock. OF&G contracts the services of Lloyd Register and Control Union UK to provide inspectors with the relevant competencies for a wide variety of inspections.

Animal welfare is of utmost importance and inspectors are trained to assess feather loss and injuries attributed to pecking within the flock. Where injuries and feather loss are identified by the inspector, a plan is required to show how this will be alleviated for that particular flock and how this will be avoided in the future”.

Next steps, including action plan

The EIP-funded project theme of maintaining feather cover in laying hens also demonstrated that the producers had a good relationship with their pullet rearer and were kept informed as to performance and husbandry. The majority visited their flock during rear. We therefore plan to concentrate on the synchronicity between rear and lay, given its importance.

Action plan

We are pleased to have been able to secure funding from industry to be able to retain our PRO until the end of 2021. This will enable us to continue our work.

Despite the project 'officially' ending, we will be continuing to collect outcome data from the trial flocks / farms to include feedback from FCAP's, feather scores and mortality.

Whilst including only a small sample size of farms, the project demonstrated that FCAPs can lead to changes in flock management with facilitated support using an approach based on MI, which has been demonstrated to show positive results with producers. As such, the next phase for the LHWF is to roll out FCAP's nationally within the laying hen sector, with the longer-term aim to embed the FCAPs into veterinary visits and the 'Veterinary Health and Welfare Plan' (VHWP). We will therefore deliver training and resources needed for vets to adopt MI approaches.

We are also developing a training package to be able to roll out the FCAPs to the wider industry in conjunction with and using the field staff of breeders and packers, as well as feed company representatives. We will then hopefully start to see the widespread impact on feather cover necessary before any move to non-trimmed beaks.

Timeline	Output/milestone
August 2020 - ongoing	Approach producers to continue collection of outcome data from trial farms to include feedback from FCAP's, feather scores and mortality
September 2020 - ongoing	Collect industry data on mortality, feather scores from additional laying hen farms, including flock size and beak status, to monitor industry progress in managing flocks by collaborating with assurance schemes such as Lion Code and RSPCA assured
September 2020	Contact existing trial farms and their veterinarians to pilot on-line MI training using interactive webinars
August 2020 – ongoing	Using LHWF website, social media channels and poultry publications, to publish and promote FCAP's
August 2020 – November	Preparation of MI on-line training material to trial on-line workshops for poultry veterinarians
August 2020 – December 2020	Project publication(s) in scientific journal(s)
August 2020 – ongoing	LHWF workstream on the synchronicity of rear and lay
November – December 2020	Pilot on-line MI training material with poultry veterinarians
December 2020 – ongoing	Trained veterinarians to commence working with other poultry producers with the help and support of the PRO and LHWF, co-creating FCAPs, collecting feather score and mortality data
March 2021	Veterinarians and LHWF to review FCAP and hard data on mortality and feather cover to confirm value of the approach

March 2021	Review of veterinarians' MI approach with PRO and recap of training/support as required
April/May 2021	Delivery of face to face MI workshops to all poultry veterinarians and other poultry specialists to roll out the approach if the pilot indicates it is successful
May 2021	Workshop for producers at Pig and Poultry Show
June 2021	Update review of MI approach. Discussion with vets whether some producers meet the criteria to manage an intact flock
July/August 2021	Interim LHWF review to observe industry progress in maintaining feather cover in IRBT and non-beak trimmed flocks. To collect data, including feather scores and mortality from new non-beak trimmed flocks to see whether FCAPs delivered using an MI approach is successful in maintaining feather cover and mortality below the desired threshold
Autumn 2021 - ongoing	FCAP training events for field staff of breeding & egg packing companies, and feed company representatives – 'developing and putting bespoke FCAP into action'

(Covid-19 dependent)

Future LHWF workstreams

In addition to the new workstream on the synchronicity between rear and lay, which has been shown to help in reducing IP, the LHWF has a number of other workstreams in place. These include; novel rearing techniques; reducing keel bone damage; and catching and transport.

Future funding

It would be beneficial if grants could be made available under the Future Farming reforms for producer and stockperson training, and financial incentives given to recognise those maintaining well-feathered flocks⁷ non-trimmed flocks. This is especially important since, whilst the public might say they want improved welfare standards on farms, they are not prepared to pay for the additional costs.

We believe that government should support an 'Innovation fund' to support producer-led trials of innovative practices to maintain feather cover, where moderate infrastructure or equipment changes are required.

⁷ Financial incentives are a good idea for well feathered flocks, however, despite some producers trying their very best to keep feathers on birds, unfortunately it does not always show good results. Every flock is different.

We remain engaged in the work of the Animal Health and Welfare Pathway, and whilst primarily aimed at improving the health and welfare of livestock, there remain opportunities for the laying hen sector.

We also note the potential for financial support such as:

- the provision of one-off payments through a grant-based scheme to help farmers make investments that will improve animal health and welfare
- the development of a payments-by-results scheme through the provision of on-going funding to farmers for specific health and welfare enhancements which demonstrate production above the regulatory baseline
- other schemes to improve the health of animals and reduce endemic disease, in particular; to improve productivity; support international trade; reduce greenhouse gas emissions; and slow the rise of anti-microbial resistance.

Conclusion

We hope that this update demonstrates our commitment to continue to drive forward the strategies and actions needed to be able to show tangible reductions in injurious feather pecking. We therefore look forward to continuing to work with the wider industry, with the support of like-minded NGOs, veterinarians, government and others, to achieve this aim.

We are also mindful of the need to address the higher levels of mortality in non-beak trimmed flocks and intend to take this forward as a matter of priority.

In an ideal world we would not wish to beak treat as there is an economic cost associated with this (3.0 - 3.5p/chick). However, until it can be reliably demonstrated that sufficient progress has been made in reducing IP, the unintended consequences of stopping IRBT too early is highly likely to be disastrous for bird welfare. This is especially relevant bearing in mind that the UK uses brown bird genotypes, with the largest number of FR birds in the world.

Whilst we continue to be mindful of concerns raised in some quarters over beak trimming, it is important to stress that IRBT cannot be compared with the invasive 'hot-blade' beak trimming method (illegal in the UK since 2010 except in an emergency situation - see Annex F for beak illustrations). Of note is that IRBT is becoming standard practice in other countries, many of whom will wish to trade with the UK after the Brexit transition period (31st December 2020).

As it remains our primary consideration to continue to safeguard the welfare of laying hens at all times, we are not yet in a position to provide you with a date when we believe we can cease beak treatment without the very real possibility that bird welfare would suffer and the associated reputational damage that would follow, although we continue to make progress toward this.

We had previously arranged for your predecessors to visit one of the trial farms and a commercial pullet hatchery to see the IRBT process, however, the visits did not take place. We would therefore like to extend the same invitation, which we believe will be

a useful opportunity to demonstrate the progress that is being made. In addition, you would be welcome to attend a future meeting of the LHWF.

Yours sincerely.

A handwritten signature in black ink that reads "Andrew Joret". The script is cursive and somewhat informal.

Andrew Joret
Chairman, LHWF

Glossary of Terms

BEIC	British Egg Industry Council
BTAG	Beak Trimming Action Group
BVPA	British Veterinary Poultry Association
EC	Enriched (colony) cage
FCAP	Feather Cover Action Plan
FR	Free range
IP	Injurious pecking
IRBT	Infra-Red Beak Treatment
KE	Knowledge Exchange
LHWF	Laying Hen Welfare Forum
MI	Motivational Interviewing
PRO	Project Research Officer
VHWP	Veterinary Health and Welfare Plan

Annex A

Members of the Laying Hen Welfare Forum Management Group

Andrew Joret (Chairman)	BEIC
Mark Williams	BEIC
Mike Tyers	Stonegate Farmers
Claire Weeks	University of Bristol
David Brass	Lakes Free Range Egg Company
Stephen Lister	Independent poultry veterinarian
Robert Gooch	British Free Range Egg Producers Association
Allan Pearson	RSPCA
Jess Stokes	Royal Agricultural University
Aimee Mahony	NFU
Defra representative	
APHA representative	

Recommendations of Beak Trimming Action Group

Recommendation 1 - A ban on beak trimming of laying hens should not be introduced in 2016, as, on the basis of practical experience and available research, it is considered that this could be detrimental to overall welfare in an unacceptable number of laying hens. Compassion in World Farming disagree with this recommendation. They believe that a ban on beak trimming should be introduced in 2016, with an implementation date to be determined by the Secretary of State, based on further reviews of progress.

Recommendation 2 – Producers and the industry as a whole should nevertheless continue to make efforts to avoid the need for beak trimming, particularly by reducing injurious pecking (as in the following recommendations), to the point where there is sufficient confidence to stop beak trimming. This may be achieved in some systems more readily than in others. Progress should be formally reviewed by Government. If significant progress is not being made, then it should consider further formal action, including legislation.

Recommendation 3 – To take forward Recommendation 2, all laying hen producers should draw up bespoke action plans to implement the management strategies drawn up by FeatherWel. BTAG recognises that these management strategies have been incorporated into the latest version of the British Egg Industry Council's (BEIC) Lion Code of Practice and the RSPCA Welfare Standards for Laying Hens (implemented by RSPCA Assured scheme, Freedom Food) and recommends that all laying hen farm assurance schemes should monitor uptake of the management strategies by their members. RSPCA and Compassion in World Farming members expressed their minority view that the requirement for such action plans should be laid down in legislation.

Recommendation 4 - All farm assurance scheme audits/inspections should monitor mortality, feather cover and records of injury attributable to injurious pecking in all laying hen production systems so that producers can benchmark their own performance with previous flocks and identify targets for improvement. Progress should be assessed on a flock-by-flock basis as part of the review of the farm's veterinary health and welfare plan. The aim should be for continuous improvement in mean feather loss scores, using the AssureWel scoring system (already in place in non-cage systems), and injuries attributable to injurious pecking. Failure to make such improvements should be seen as possible non-compliance with the scheme requirements.

Recommendation 5 – BTAG (or a similar independent body, such as the Laying Hen Welfare Forum) should continue to monitor progress in reducing the incidence of injurious pecking in the national flock. Such a body should report to Ministers on a biennial basis with the results of assurance scheme monitoring of feather cover and mortality attributable to injurious pecking along with updates on the proportion of beak trimmed flocks and uptake of management strategies.

Recommendation 6 - Knowledge transfer aimed at disseminating developing research and practical information to farmers on interventions aimed at reducing the risk and likelihood of injurious pecking should continue. For this to happen, FeatherWel and other resources will need to be updated as new knowledge and findings emerge from a growing body of work around the world, and industry should show a robust commitment to implementation of relevant advice in all production systems. A funding source should be identified.

Recommendation 7 – Industry should continue to consider other approaches to reduce the likelihood of injurious pecking. These could include nutrition, genetics (including choice of white versus brown egg laying strains) and other management and husbandry strategies. The breeding companies should keep up the momentum and make use of genomic technology to accelerate progress to reduce the likelihood of injurious pecking in laying hen strains. It may be appropriate for these approaches to be considered on an EU-wide basis. Further research is warranted into nutritional trigger factors and the impact of dietary changes on the incidence of injurious pecking, and into approaches to reduce injurious pecking through various dietary inputs.

Recommendation 8 – The Government should support research which is needed to establish sensitive and cost-effective methods for the earliest possible detection of injurious pecking, and to develop evidence-based protocols to respond promptly with the aim of avoiding the escalation and spread of this behaviour.

Beak Trimming Action Group Report – section on Genetics

“The breeding Industry has been investing in balanced breeding programmes over the last 15 years, but a genetic solution where efficiencies, animal welfare and sustainability have to be balanced is not a ‘quick fix’. The advances in genomic selection and breeding technologies have enabled the choice of breeding candidates to be made much earlier in life due to determination of a “genomics based” breeding value. However this is still in the very early stages of development and has yet to establish benefits on selection traits, including behaviour.

In fact, selection for bird survival has been implemented in company breeding programmes for several decades and companies include survival as a breeding goal trait in their breeding programmes. Most initial field studies have used bird survival to a given age as the trait for selection for higher survival in individuals. However, unless family information is included (i.e. using information on related animals housed in groups), higher mortality rates and lower productivity result as, inadvertently, more aggressive birds are selected for breeding. The most recent research suggests that to reduce mortality due to cannibalism, selection should not only consider the direct effect of an animal’s own genes, but also the indirect (or ‘associative’) effect of an individual on its group members.

A bird’s chance of survival is highly influenced by the cannibalistic behaviour of its cage or colony members, and survival in purebred laying hens is known to be influenced by social interactions with others. New breeding programme research is aiming for the genetic improvement of laying hens so that they become more ‘sociable’.

Dr Joanne Conington, a genetics expert serving on the Farm Animal Welfare Committee, was co-opted to advise BTAG on the current state of play into genetics research aimed at reducing the likelihood of injurious pecking in laying hen strains. She visited the Hendrix Genetics (ISA) and Hy-line (Wesjohann) breeding companies to assess current and planned research in this area. Areas being investigated include the assessment of sociability and robustness in genetic selection. Genomic selection technology is also being used to improve bird survival and may accelerate progress on genetic improvements in this area. Dr Conington concluded that the greatest influences on survival remain non-genetic, meaning that management and feeding strategies continue to be key components in the evaluation of survivability of laying hens. She advised that the earliest commercially available strains, with a significantly reduced propensity to peck, could become available in 2025. This has a significant impact on setting timetables for improvements in reducing injurious pecking using genetic interventions, whilst accepting that such interventions would not, in isolation, be likely to eliminate injurious pecking”.

Updates from Genetic Breeding Companies

Genetics company A

“Company A continues to express high priority on livability, reduced pecking and good feathering in their brown and white layer breeding programme.

The breeding programme remains a balanced programme with focus on several key performance traits that serve the welfare of the hen, the happiness of the producer and global sustainability of nutritious and healthy egg production. As heritability's of welfare traits are generally known to be fairly low, genetic improvements take time and flock management such as nutrition, housing, adaptation of rearing to production circumstances, etc., are other key factors to incorporate. In the breeding programme both pedigreed pure lines and cross-bred daughter-groups are tested with intact, non-treated beaks. The mortalities recorded in the field-tests serve as input for selection for improved livability. Feather-scores are part of the selection decisions, where only the birds with breeding values indicating good feathering are candidates for selection. Selections incorporate genomic selection, combining both phenotypic and genomic data with full-known pedigrees.

Experience from other countries show clearly that banning the treatment of beaks at day-old results in increased mortality, worsening feather-conditions and the length of the production-cycle gets shorter. Environmental circumstances in cage-free and free range situations are challenging and continuously changing, which makes it very difficult to measure the small steps of genetic progress in field situations.

The company continues to place great importance on testing and selecting with fully beaked birds, reducing mortality, improving feather-cover and working on behaviour to get more robust and social birds, both white and brown”.

Genetics company B

“In all our breeding programmes the recording of social behaviour of hens in a group continues to be one of the major breeding goals. The importance of the breeding target ‘Feather cover and a docile social behaviour’ is increasing as the number of laying hens housed in cage-free environments rises. The conventional performance traits (egg number, egg quality, feed conversion, etc) are still dominant, but with a continuously reduced relative weighting for the total overall selection index.

In several European countries (Germany, Austria, Denmark, Sweden) beak treatment is no longer possible. Experiences from these countries show that the mortality of hens is higher under no beak treatment conditions, but can be controlled. However, feather cover of non-beak treated flocks is clearly worse and much more variable compared to a situation with an infra-red beak treated chick at day old in the hatchery, which is the industry standard nowadays in countries which continue to allow this procedure. Besides the higher mortality and a worse feather cover, the additional time of the farm staff for monitoring the flocks and taking preventive and curative actions (activity material, pecking stones, litter management, etc) is increasing the cost of egg production. In a field study, the overall additional cost for egg production with intact beaks was estimated to be circa 0.50 to 0.70 €cent higher per egg” (LWHF calculation: £0.05 – £0.09/dozen: or £23,040 – £39,424 for a 16,000 bird flock cycle).

“In the breeding process, key is to capture phenotypic data. The most important way of data recording is still based on traditional housing of pure line hens in single cages. Of course, in this environment there is no possibility to record social behaviour. Therefore, for more than 30 years on our breeding farms there are around one third of the pure line population housed in family groups (full sib and half sib families) of 4-7 hens per cage with several repeated groups per family to achieve enough statistical power of successful selection. In these family groups the feather cover is scored 6 times during the life of the birds and mortality reasons (cannibalism) are recorded to an age of 100 weeks. In addition to these pure line birds in family groups, we are also testing crossline birds with known pedigree in commercial farms (multiple age farms for challenge conditions) in family group cages to achieve more information about disease resistance (general liveability) and feather cover under poor feed conditions. These tests are run at present in Spain, Russia, Colombia and Japan, all with non-beak treated hens to achieve a higher variation between the families in a challenging environment.

Of course, the behaviour traits are not the only breeding targets and in some lines / generations the company are already happy if they can avoid a negative trend instead of making big progress. But selection is always a continuous progress.

As a correlated trait for the last 6-7 years, beak shape is also recorded. The length of the upper beak is measured and individuals with a shorter beak are preferred in the selection decisions. Genetic progress in this trait is continuing and now reaching the commercial egg production level. This will lead to the bird having a less ‘sharp tool’, therefore leading to less damage to flock mates.

Breeding a bird with better social behaviour is a continuous process and can never replace a necessary change in management for non-beak-treated flocks. A more docile behaviour is achieved gradually generation by generation and the threshold where an environmental stress is creating animal welfare problems will increase steadily every year”.

Genetics company C

“Continues to work at the pedigree level of their breeding stock to minimise or eliminate the need for beak modification. Our pedigree birds and field analysis birds are never beak-trimmed, therefore we can consistently select individuals within lines and select crosses among different lines that display the best behaviours and interactions between each other. Our company geneticists and bird experts assess feather cover, liveability, and behaviour to continuously improve these traits. All our pure-line birds are fully pedigreed and we place dozens of paternal half-sib daughters together in the same group floor pens and score these families for temperament and feather coverage. Our commercial stock is recognised for their industry-leading liveability due to low cannibalism, low feather pecking and superior feather coverage and it can be directly attributable to this unique family selection technique. Progress continues to be made to reduce the need for beak treatment, however, with the increasing number of non-cage hens, the challenge of maintaining good feather cover remains. We appreciate the work that Defra and the BEIC have put into researching beak treatment and feather cover and are looking forward to future collaborations”.

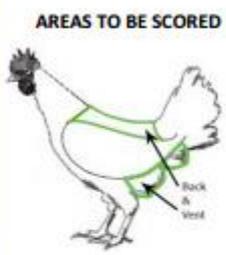
Feather scoring guide



FEATHER SCORING GUIDE
Working together to reduce feather pecking

METHOD AND SAMPLING

- Visually assess the back/vent area of the bird
- Score at least 50 birds per shed i.e. 5 birds in each of 10 different areas of the house and/or range
- If borderline e.g. 0/1 or 1/2, allocate the lower score
- Feather re-growth = feather loss



SIZE GUIDE

Less than ruler = score 1

More than ruler = score 2

When this guide is printed on A4 this ruler is 5cm in size

BACK/VENT SCORE 0 No bare skin visible, no or slight wear, only single feathers missing



BACK/VENT SCORE 1: Moderate wear, damaged feathers or 2 or more adjacent feathers missing up to 5cm bare skin



BACK/VENT SCORE 2: 5cm or more bare skin visible



Photographs courtesy of AssureWel

Intact beaks compared with Infra-Red Beak Treatment, 'Hot-blade' beak trimming, De-beaking

To reduce the damage inflicted by IP, the sharp tip of the intact beak (Figure 2) is prevented from growing by using infra-red beak treatment (IRBT) in day-old chicks (Figure 3), which shows that the method is considerably less damaging than hot-blade beak trimming, which has been demonstrated to cause both acute and chronic pain and accordingly is not permitted for routine use in the UK (Figures 4 and 5) leading to a blunted, but otherwise normal length beak in the older bird (Figure 6).

The IRBT process can only be carried out on day-old chicks and not older pullets or laying hens.

In an older flock, where despite all efforts to avoid IP there is still a problem, the only courses of action are:

- severe dimming of lights below acceptable levels
- emergency 'hot-blade' beak trimming of adult birds under veterinary supervision
- early depopulation of the flock to slaughter.

All of these actions have severe bird welfare and economic implications.

Figure 2 – Non-trimmed adult bird (note sharp hook)



Figure 3 – Infra-Red Beak Treated chick (left) and non-treated chick (right) at day old



Figure 4 – Result of ‘hot-blade’ beak trimming at 7 days of age



Figure 5 – ‘De-beaked’ adult bird using ‘hot-blade’



Figure 6 – Infra-Red Beak Treated adult bird

