ADVOCATES FOR ANIMALS

Response to Scottish Government Consultation:
Beak trimming of laying hens
March 2010

Q.1 Do you consider the Government's approach of postponing the ban on beak trimming and permitting routine beak trimming using infra-red technology only is the most sensible and pragmatic approach to adopt?

The large majority of commercial laying hens are still routinely beak-trimmed in all types of husbandry systems. In about 90% of cases, the infra-red (IR)-beam method is used, which has superseded the hot-blade method of beak-trimming in most hatcheries[1]. Unlike the hot-blade method, the IR beam does not immediately sever the beak, but burns the beak tissue in the treated area so that it dies and falls off up to 3 weeks later.

In spite of routine beak-trimming, more than half of hens may currently suffer from injurious pecking leading to feather-loss and injury[2,3] sometimes causing death. Routine beak-trimming therefore has not proved an effective solution to the problem of how to keep commercial laying hens in conditions of good health and welfare. We believe that the problem of injurious pecking must be addressed by more humane and innovative management methods, including breeding, rearing and feeding conditions, avoiding stress and providing an environment more consistent with the natural behaviour of hens.

Government is now proposing that the current situation should be continued, but that routine beak-trimming of chicks should be carried out only by the IR-beam method, while continuing to allow re-cutting at a later age using the hot blade method. We find this proposal very disappointing, because we believe that the role of Government should be to encourage the industry towards the more welfare-friendly animal farming that is one of Government's stated goals.

Beak-trimming by either hot blade or IR-beam is a mutilation or 'partial amputation of the beak'[4]. It is painful at the time[5], in the days and weeks following[6,7] and potentially long-term, depending on method and age of cutting. In 2007, the Farm Animal Welfare Council (FAWC) listed the potential impacts of the mutilation as: *trauma to the bird during the procedure, chronic pain as a result of the procedure, loss of a sensory tool, loss of integrity of a living animal by the removal of part of its beak*[8].

The 'need' to amputate up to one third of a chick's beak in order to reduce injury and death from pecking and cannibalism in itself indicates that there is something very wrong with breeding and management practices in the egg industry. We believe that the Scottish Government was entirely right to set a date for ending the practice of beak-trimming (January 2011), in the Welfare of Farmed Animals (Scotland) (Amendment) Regulations 2002. This gave the industry eight years to make the necessary changes in husbandry and genetic selection.

While we recognise that the proposed postponement of the beak-trimming ban is intended to prevent suffering from pecking and cannibalism, we believe that the postponement is wrong from the point of view of animal welfare and would set an inappropriate precedent for future animal welfare regulation.

Postponing the ban would mean missing an important opportunity to ensure that the egg industry:

- gives real priority to animal welfare
- allows hens to exhibit more natural behaviours
- meets public expectations regarding respect for animal welfare in the food industry.

In support of our views, we would make the following points:

1. Evidence on pain and distress caused by beak-cutting

Beak-cutting by either the hot blade or the IR beam method involves cutting, damaging or removing nerves (mechanoreceptors, nociceptors) and blood vessels[5], and is done without pain relief. The IR beak-removal process involves holding the chick by the head, with its feet off the ground, for 15 seconds and the beaks of IR-treated chicks show evident physical damage and reddening[9]. According to DEFRA-commissioned research, the IR beam affects 36% of the beak area and results in a 44% reduction in beak length compared to controls by 4 weeks of age, a very significant reduction[10]. The researchers note that 'There was a trend for a beak step (lower beak protruding by up to 30%) in treated birds; the functional consequences of this (if any) are not clear'[10] – but it would be a normal assumption that the beak would be less useful for some purposes as a result of this change to its natural shape.

While the IR beam method used on young chicks may be less immediately traumatic than the hot blade method, there is no evidence that it offers sufficient improvement for the longer term to justify the continuation of beak-trimming.

Damage to beak of chick as result of IR beam treatment (right), compared to control (left). From Glatz and Hinch, ref 9.

Comparisons of IR beam and hot blade beak-cutting indicate that both methods cause acute pain and continuing pain or discomfort over days or weeks. We note that the recent DEFRA-commissioned study at Glasgow University concluded that, from 10 weeks old, birds subject to IR beak-cutting at one-day old had normal mechanical sensitivity in the beak, no increased pain in the beak and no neuromas resulting from beak-cutting[10]. But these conclusions are limited to birds of at least 10 weeks old and are not supported by other studies on chicks under 10 weeks old. Several studies have found significant effects on chicks' behaviour and growth up to 5 of 6 weeks of age at least, indicative of stress, discomfort or pain lasting for several weeks after beak-cutting.

(i) Studies from the US Department of Agriculture and Purdue University concluded that 'Results indicate that acute pain occurred with both trimming methods [ie HB and IR].' For one week 'There was an overall effect of trimming, irrespective of method, on behavior, particularly eating and drinking behaviors ($P < 0.05$). Specifically, IR birds were less active ($P < 0.01$) and spent less time eating ($P < 0.01$) and drinking ($P < 0.05$) than did control birds. ' For up to 5 weeks, there were 'notable effects of treatment on production', and 'growth and feed intake were lower in HB and IR birds compared with control birds ($P < 0.05$), with IR birds performing least well until the fourth week of the study ($P < 0.05$)' [6]. A reduction in normal activity, feeding and growth rate is usually taken to indicate stress, illness or pain.

(ii) Histopathology of trimmed beaks for the Australian Poultry Cooperative Research Centre found evidence of neuromas persisting to adulthood, for both the hot blade and IR methods[9].

(iii) US research in 2004 found that chicks whose beaks were treated with IR beam at one day old 'experienced significantly lower BW [body weight] from 3 to 14 wk and ate less total feed by 4 wk, compared to birds with intact beaks'[7] .

(iv) Research in Scotland found that both beak-trimming methods used on broiler breeder chicks were associated with small but significant reduction in bodyweight (observed up to 6 weeks of age), with the hot blade treated birds being more affected[11].

In conclusion, partial beak-removal using the IR-beam method:

- Is painful to chicks at the time
- Results in altered chick behaviour indicating pain or distress for several weeks following treatment
- Does not guarantee that a significant proportion of pullets will not be re-trimmed using the more painful and traumatic hot-blade method at a later date.

2. Failure of the industry to change practices during the phase-out period

Nothing has occurred between 2002 and the present that should have changed the Scottish Government's view that routine beak mutilation is an inappropriate management method for laying hens. In fact, research since then tends to strengthen the case for a ban. The industry has had a generous phase-out period to address its husbandry standards. We note that Compassion in World Farming, which was involved in the Beak Trimming Working Group set up by DEFRA, believes that 'the industry has primarily used the phase out period to press for the ban to be dropped rather than using these eight years to constructively prepare for keeping hens without beak trimming'[12] .

As the Scottish Government consultation paper states[1], the vast majority of laying hens (in all husbandry systems) are routinely beak-trimmed as chicks, meaning that the industry has not up to now made significant efforts to change its husbandry and breeding practices. If the ban is postponed, this is merely rewarding egg producers for having failed to change their practices in order to meet the requirements of the 2002 regulation and sets a poor precedent for the future.

3. The need for egg production to prioritise animal welfare

In 2007 FAWC asked the question 'Can beak trimming by any method be justified to allow large numbers of laying hens …to be kept on a commercial scale?'[8]. This is the fundamental issue that the 2002 regulation addressed correctly and we urge the Scottish Government not to lose sight of it.

We see the fundamental problem as the industry's pursuit of maximum egg production efficiency rather than prioritising the quality of life of the hens. Hens that are genetically selected and managed for maximum yield and feed efficiency have a tendency to be more easily stressed by a number of factors (including under-nutrition in relation to egg output, disturbance, competition for food and water, high stocking density indoors, inability to range). As DEFRA's 2005 review and guidance pointed out, the demands of

high production often result in hens being less able to adapt to changes in their environment (i.e. they are less robust), and they are more likely to react to stress by feather pecking, potentially leading to injury and cannibalism[13].

We note that research from the Scottish Agricultural College shows that, in dairy cows, high productivity is associated with more competitive/aggressive behaviour and lower levels of social synchrony[14]. There may be similar effects in laying hens: US experiments have shown that selection for individual high production is associated with greatly increased mortality from injurious pecking in commercial laying hens strains[15]. These data suggest that breeding and management for high production in intensive conditions will have a negative effect on the social interaction between hens.

A survey of 26 flocks by Bristol University Department of Clinical Veterinary Science has shown that, by the end of their laying period, many high-yielding laying hens (from all systems) are in poor condition resulting from emaciation, broken bones, and damage to feathers and vents, due to the combined effects of selection and management for maximum production. In particular, 81.2% of the hens had medium or severe vent or abdominal feather damage[3]. These findings are a powerful argument for change in the egg industry and make it clear that the practice of routine beak-trimming has not ensured high welfare up to now.

The argument for the postponement is that the industry has not yet developed methods and strains that will enable them to dispense with beak-trimming. This is not strictly true because it is already known how to keep hens without beak-trimming, as is achieved in the highest standard of free-range and organic egg farming. Hens that are of more robust strains and kept under less production pressure, at lower stocking density indoors and with access to an attractive range, are less likely to need to be mutilated in order to prevent injurious pecking[13]. Therefore, from the point of view of protecting animal welfare, the postponement of the ban is unnecessary.

As the Scottish Government points out, Sweden, Switzerland and Austria, where flocks are smaller and labour inputs are larger, are able to run their egg industries without routine beak mutilation[1]. Beak-trimming is also banned in Norway and Finland[5]. We welcome the Scottish Government's intention to learn lessons from these countries and suggest lessons could also be learned from British farmers at the high-welfare end of premium free-range and organic egg production.

We note that the standards operated by the Scottish Organic Producers' Association (SOPA) prohibit beak-trimming. Soil Association (SA) standards permit beak-tipping only in exceptional circumstances, with a requirement for written permission following veterinary advice, after which the flock management plan must be reviewed to avoid the problem arising in future.

We believe that the most important step that the Government can take is to set the conditions for the whole Scottish industry to move to the standards of the best, where hens are kept in smaller flocks and with higher standards of management and care. The

best systems are able to optimise the measures recommended by Defra and other authorities to minimise the risk of injurious pecking, including[13, 16]:

- Breeding and use of more physically robust strains of hen, with a lower propensity to peck others
- Access to an attractive range area, including cover, and active encouragement of ranging
- Delaying onset of lay to up to 20 weeks of age, to ensure that young hens are sufficiently mature to meet the demands of egg production
- Optimum nutrition at all times during rearing and lay
- Feed provided in a way that ensures it is time-consuming to eat
- Material for foraging both indoors (appropriate litter, whole vegetables, etc.) and outdoors to allow normal pecking behaviour. In natural conditions foraging and pecking takes up much of the hen's time budget
- Perches and refuge areas to ensure the hens feel safe and unstressed indoors
- Housing in small groups (possibly using partitions) and conditions that allow hens space to escape from or avoid any conflicts that arise
- Avoidance of changes in location and management, since these are known to cause stress.

We believe that the Scottish egg industry should be entirely capable of keeping birds in conditions which do not lead to injurious feather-pecking and which do not require the routine mutilation of birds. We urge the Scottish Government to introduce the beak-trimming ban as previously intended.

Q 2. Do you agree with the Government's approach of not setting a specific date for a review of the deferment of the ban on beak trimming laying hens until after the conventional cage ban in 2012 and until results of further research are known?

It is already known how to keep hens without beak-trimming (by keeping them in better conditions more consistent with their natural behaviour and by reducing the production demands put on them). Therefore we believe no further research is necessary. We are opposed to the postponement of the ban and, if the ban is postponed, we would like to see Scottish Government take immediate steps to reform welfare standards in the egg industry and re-instate the ban speedily.

Q.3. Do you agree that there will be no additional costs if beak trimming of laying hens is restricted to using the infra-red method? If you do not agree, can you provide evidence of what any likely costs would be?

No comments on Q3

Q. 4. Do you have any comments on the draft guidance? Is it clear and easily understandable? Is there any other information/advice that you consider should be included?

We are concerned that beak-trimming or re-cutting by hot blade will still be permitted under the proposal as an 'emergency procedure', to prevent damage from feather pecking outbreaks that do occur among older pullets and adult hens.

Beak-trimming by hot blade at older ages is associated with more long-term pain[8] and should not be seen as an acceptable solution to pecking oubreaks. The Scottish Government does not give an estimate of how prevalent re-cutting using the hot blade is and we think that reliable figures should be provided to stakeholders. We agree with the Draft Guidance recommendation that: 'If behavioural problems occur in birds over 10 days old which lead to injurious feather pecking, they should be tackled immediately by appropriate changes in the system of management', and not by beak-cutting with a hot blade. We believe that the permission for hot blade cutting or re-cutting should be removed from the Guidance.

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