

# **“FOR THEIR OWN GOOD”**

**A Study of**

## **FARM ANIMAL MUTILATIONS**

**A**

**COMPASSION IN WORLD FARMING TRUST**

**report by**

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**Foreword by Dr. Vernon R. Fowler**

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# **“FOR THEIR OWN GOOD”**

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## FOREWORD

I welcome this report by Mr Peter Stevenson on the vexed subject of those procedures in animal husbandry which can be regarded as mutilations. Mutilation is an emotive word and is shunned by teachers, farmers and veterinarians because of the images which it can conjure up. We should much prefer to retreat behind the euphemism of 'minor surgical procedures' to escape any possible moral implication associated with the word. In so doing, I think we have done a disservice to a proper discussion of the issues, not always recognising that many of these procedures involve considerable, and not always temporary, pain. Mr Stevenson and the Compassion in World Farming Trust have done well in bringing forward such an important and well-referenced document.

'Does it hurt?'. 'It only hurts if you think it does'. This historic macho reply of Mr Brian Close, cricketing prodigy of Yorkshire and England, endeared him to myself and thousands of other young Yorkshire fans. We tried to emulate his supreme disregard of the pain, in his case being struck on the head by a cricket ball. My illusion of possessing similar stoicism was dispersed when (as a volunteer patient for my then recently qualified dentist brother), my anguished gasp was met with a nonchalant 'Don't be silly, we know that couldn't hurt'. I mention these two examples to show how our perception of pain in others is not so much influenced by its reality, but by our cultural mind set at the time.

Having worked in the area of farm animal husbandry for over forty years, it is easy to see how our attitudes to the possible pain suffered by animals is the product of the expectation and example of our peers. Over 25 years ago, many scientists including myself, found that consumers were not worried by the slightly different aroma of meat from uncastrated boar pigs and campaigned accordingly. We took a great deal of flak and were accused of trying to wreck the industry and of having 'gone soft' on animals. Our clear results which also showed benefits in improved welfare, faster and leaner growth and better feed conversion were initially drowned by the strident tones of prejudice, masquerading as experience. Sadly this important change was delayed for some ten to fifteen years. Even now, some of continental Europe has still not come to terms with the possibilities. I am glad to say that in the UK, castration of male pigs has now ceased to be common practice, not because of legislation but because all sides of the industry eventually agreed that it not only made good sense but it was also good husbandry.

I believe that Mr Stevenson's review is similarly capable of promoting debate and bringing an enhanced awareness of the problems. Without debate there is a danger that these procedures will become accepted as an inevitable corollary of livestock husbandry. Even though some of the procedures can be done humanely, it is high time that we considered the alternatives.

Mr Stevenson's review raises a number of important questions. Has not our understanding of behaviour and our skill in developing housing and environment overtaken some of these traditions? Perhaps we now have the knowledge to impart new husbandry skills that render many mutilations obsolete. Surely it is neither inevitable nor necessary to remove bits and pieces from healthy live animals to render them amenable to our purpose. I may add that I begin to doubt myself whether it is really necessary to make these procedures part of the curriculum of aspiring stockpersons. I suspect that in some cases, procedures involving mutilation have become confused with the traditional machismo of farming. Such attitudes have no place in the ethos of true stockmanship for they result in a clash of objectives, with

care and concern for the well-being of the animal on the one hand being somewhat neutralised by veiled cruelty on the other.

Does it hurt? Of course it does. It is likely to hurt not only the animal, but also the true stockperson. Our unquestioning adherence to the tradition of these practices also disfigures animal production. I am happy to commend this review to all whose concern is the well-being of the animal and the well-being of animal production as a career.

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## **1. INTRODUCTION**

Over the years the public has become increasingly aware of the problems of intensive livestock husbandry, commonly called factory farming. This term refers to rearing systems which provide animals with a) very little space and b) a barren environment. As a result, movement is highly restricted and most of the animals' normal behavioural needs are frustrated. In such systems animals are kept exclusively indoors and are thus deprived of fresh air and daylight.

Much less attention has been given to selective breeding. Nonetheless, people are becoming aware that this too can impose considerable suffering on farm animals. The principal aim of selective breeding is to enhance productivity, for example, by encouraging faster growth or developing larger animals. The problems engendered by this approach can most vividly be seen in the case of broiler chickens.

As a result of selective breeding (and rich diets), broilers grow so quickly that their legs cannot properly support their massive bodies. This leads to many birds suffering from severe abnormalities of bone development which are painful and crippling.

Pigs too are being bred to grow ever faster. Their legs cannot keep pace with the growth rate in the rest of their bodies and, as a result, they suffer from painful joint difficulties.

There is, however, a third area which has received almost no public attention. This is the widespread practice of mutilating farm animals. Lambs are castrated and tail-docked, hens and turkeys de-beaked, and the lower half of piglets' tails is often amputated. In the case of some intensive systems, animals develop abnormal behaviour in response to the limitations of the system. Factory farming's answer is not to modify the system to make it more responsive to the animals' needs. Instead they are mutilated to make them 'fit' an inappropriate system.

## **2. PIG MUTILATIONS**

Each year some 13 million pigs are reared until the age of four to six months before being slaughtered to end up as bacon, pork and ham. The vast majority are reared indoors in highly intensive systems.

These vary considerably in design and layout. Normally, however, anything from 10-30 young pigs will be kept in one pen. Overcrowding is commonplace. The floor may be of solid concrete, or may be slatted or perforated. These uncomfortable surfaces often lead to lameness or damage to the feet. Straw is usually not provided. A number of such pens will normally be kept in one dimly lit, windowless fattening house.

### **2.1 Tail-docking**

Tail-docking involves amputating the lower half of the tail. Generally, the piglets are given no anaesthetic.

Tail-biting is recognised as a serious problem in intensive pig husbandry units. Instead of addressing the root causes of tail-biting, the industry's solution is to tail-dock piglets on a routine basis. The thinking is that once the lower half has been cut away, the remainder is sensitive and pigs quickly escape when others try to bite it.

Certainly tail-biting is a serious matter. Arey (1991) has described how “wounds can become infected, resulting in abscessation of the hindquarters and the posterior segment of the spinal column. Secondary infection may occur in the lungs, kidney, joints and other parts ...”. Equally badly performed tail-docking can lead to infection, which can then run up the spinal cord, causing deep spinal abscesses.

Compassion in World Farming Trust believes that the proper response to tail-biting is not to mutilate the piglets but rather to address the factors which encourage tail-biting.

Tail-biting is generally recognised to be multi-factorial in its causation. Elements which can contribute to it include: diet, poor atmospheric environment (i.e. a build-up of gases such as ammonia and carbon dioxide) and poor housing.

#### Poor housing

In one major study pigs kept in semi-natural conditions were found to spend over half their daylight time (52%) foraging for food. Another 23% of their time was spent in exploratory behaviour, i.e. walking, orienting to stimuli, nosing and manipulating objects (Stolba and Wood-Gush, 1989). These authors wrote that:

“The data indicate that pigs are generally exploratory animals with an appreciable proportion of their time devoted to ... examining the distant and immediate environment and in collecting, carrying and manipulating food items ... They used their rooting pads to flatten and push items; the snout was used for grubbing out thick roots. Morsels on the bark and wood were licked, while old tussocks of grass were overturned so that their roots could be eaten. Young grass on the other hand was carefully grazed. In boggy areas they dug more deeply to get at the roots of sedge grasses and these together with the roots of trees appeared to be prized”.

It should be stressed that the adult pigs in this study had been reared in intensive conditions. What emerged was that even where pigs have been reared intensively, they will engage in a rich repertoire of behaviour when given the opportunity to do so.

The vast majority of young pigs are kept in barren, densely-stocked intensive units where there is simply nothing for them to do. Their strong foraging and exploratory instincts are frustrated. The piglets find an outlet for them, however, in chewing and biting other pigs.

This problem can be alleviated by providing a less impoverished environment. In particular, the provision of straw can significantly reduce tail-biting.

In one study pigs were kept either with or without straw (Van Putten, 1969). Tail-biting took place in 11 out of 12 bare pens, but in only 2 out of 13 straw pens.

Another study found that pigs given straw were more active, with 25% of their active behaviour being directed towards the straw, such as chewing and carrying it (McKinnon et al, 1989). They also found a higher incidence of chewing of penmates and pen fittings amongst pigs housed on perforated floors (i.e. without straw). The authors observed that chewing of penmates was rarely seen in pigs who were given straw.

Pearce (1993) examined the welfare of growing/finishing pigs in four different treatments: a new system called straw-flow; deep-straw; bare concrete; and fully slatted. She found that

in the two systems without straw there was significantly more chewing of penmates than in the straw-based systems. She wrote:

“These differences were thought to be due to a lack of suitable malleable substrate on the no straw treatments which caused a redirection in the exploratory and foraging behaviour of the pigs compared to the pigs from the straw treatments”.

A number of other studies show that tail-biting is significantly reduced by the provision of straw. For example, Madsen (1980) found that on slatted floors 29% of pigs were tail-bitten compared with 2% on bedded floors.

The barrenness of intensive pig units is often compounded by severe overcrowding. Tail-biting is more likely to occur in overcrowded conditions (Penny et al, 1981).

Compassion in World Farming Trust believes that the answer to tail-biting lies in part in the provision of conditions which respond to pigs' behavioural needs. In their study Stolba and Wood-Gush (1989) stressed that “given a rich range of environmental features, the stereotypies and ‘vices’ encountered in some types of intensive houses were missing”.

Similarly, Arey (1991) concluded his review article by saying that:

“The prevention of tail-biting should be approached by improving the conditions in which the pigs are kept. The first measures which should be taken are the provision of bedding and more space to prevent overcrowding ... Tail-biting is a sign that something is wrong with the system whether it is due to boredom, overcrowding, poor ventilation or diet. Its prevention should be of paramount importance”.

Compassion in World Farming Trust believes that tail-docking should have no place in compassionate animal husbandry. Instead the underlying causes of tail-biting should be addressed. The keeping of pigs in barren, overcrowded systems is a major factor contributing to tail-biting. It is unacceptable to keep young, active animals in conditions in which it is impossible for them to perform much of their natural behaviour. These systems are a disgrace and their use should be brought to an end.

### Early weaning

Early weaning has also been identified as a factor leading to tail-biting. Most piglets are presently weaned at the age of 3-4 weeks. At that age they still have a strong motivation to suckle. Deprived of their mother, they chew and nibble the ears and tails of penmates. Pearce (1993) comments that such behaviour is rarely seen among piglets weaned at 8-10 weeks but is often observed in early weaned pigs (3-5 weeks).

Similarly McKinnon et al (1989) report that a number of studies have recorded an increased incidence of chewing and massaging and nuzzling directed towards penmates and pen fittings in early weaned piglets as compared with those remaining on the sow. They add that such behaviours “are generally accepted as being abnormal and reflecting reduced welfare. The greatly increased incidence of these behaviours appear to be mainly a result of weaning age but they are also affected by the subsequent environment, being more frequent in flat decks than in straw based housing systems”.

Stolba and Wood-Gush (1989) observed that in semi-natural conditions on average the sows ceased to suckle their young only at 88 days (i.e. when they were 12½ weeks old).

In intensive systems piglets are normally weaned at a much earlier age (3-4 weeks) not because of any welfare benefit to the piglets, but simply to allow the sow to be made pregnant again as soon as possible. Today's pig farmer expects to get an average of over 2 litters per sow each year. If piglets were only weaned at the age of 12 weeks, this target could not be met.

Compassion in World Farming Trust believes that early weaning should be ended with piglets being allowed to suckle until the natural age of about 12 weeks. This would help reduce the incidence of tail-chewing and tail-biting. It is through an end to early weaning and overcrowding together with the provision of straw that tail-biting should be tackled, not by mutilating piglets by amputating part of their tails.

### 1994 Regulations

The Welfare of Livestock Regulations 1994 provide that tail-docking shall not "be carried out routinely but only when there is evidence, on the farm, that injuries ... to other piglets have occurred or are likely to occur as a result of not carrying out" this procedure.

The prohibition on routine tail-docking is, at first sight, a significant development. Compassion in World Farming Trust fears, however, that this prohibition may in practice be undermined by the proviso that tail-docking may be carried out where tail-biting has occurred or is likely to occur as a result of not docking piglets' tails.

This approach misunderstands the problem. As indicated above, tail-biting occurs not because of a failure to tail-dock, but because of, among other things, overcrowding, early weaning and a failure to provide an environment which enables pigs to forage and explore.

By providing that tails may be docked to prevent tail-biting, the law encourages the pig industry to think that it may continue to mutilate piglets. Instead the law should prohibit docking altogether and insist on the provision of husbandry systems and practices which respond to pigs' needs.

## 2.2 Castration

Traditionally many pigs were castrated as it was believed that 'boar taint' impaired the quality of the meat from sexually mature males.

Few pigs are castrated in the UK compared with 25 years ago (FAWC, 1992). The practice, however, still continues, albeit at a relatively low level. In the vast majority of cases piglets will not be given an anaesthetic to help them cope with this painful operation.

One method of castration is for an incision to be made in the piglet's scrotum, with each testicle then being slowly pulled out. Alternatively a rubber ring is applied to constrict the flow of blood to the scrotum; in time the testicles fall off.

The Ministry of Agriculture's Code of Practice states that "castration is a mutilation and should be avoided wherever possible" (MAFF, 1991). The Farm Animal Welfare Council has condemned pig castration as "a considerable welfare insult" and a "largely unnecessary mutilation" (FAWC, 1992). The FAWC stressed that castration should be avoided.

The reason why the FAWC described castration as largely unnecessary is that nowadays most pigs are slaughtered before they reach the age of sexual maturity. This means that there is no danger of the carcass being affected by boar taint.

Rubber rings can be used without anaesthetic in the first week of life. Until 1994 the law permitted other methods of castration to be performed without anaesthetic on pigs up to 2 months old (the Protection of Animals (Anaesthetics) Acts 1954 and 1964 as amended).

The Welfare of Livestock Regulations 1994 have amended the position by lowering the age at which a pig may be castrated without anaesthetic to 4 weeks or less (rubber rings can still only be used in the first week).

Compassion in World Farming Trust believes that the 1994 Regulations should have gone further and prohibited altogether the castration of pigs except where a veterinary surgeon certifies that the mutilation is necessary for therapeutic reasons. In such cases the use of an anaesthetic should be compulsory.

### **2.3 Teeth-clipping**

On many farms it is routine practice to clip the piglets' eye teeth almost down to gum level during the first few days of life. The degree of pain involved will, to some extent, depend on the skill of the stockman.

The justification normally given for teeth-clipping is that it prevents piglets' teeth from lacerating the sow's udder and from damaging the faces of litter mates as they compete for teats. In practice the lacerations on the faces of adjacent pigs are usually superficial.

The modern sow has been bred to have litters of as many as 10-12 piglets, whereas in nature wild pigs would have just 4-5 piglets. A litter of this size would be much less likely to damage the sow's udder than one of 10-12 piglets.

Thus the danger of piglets damaging the sow's udder has arisen largely because sows have been selectively bred to produce large litters. The industry's solution to this problem is to clip piglets' teeth. Surely the proper approach would be to reverse the breeding process and return to producing sows who have small litters.

Time and again modern livestock practices give rise to problems which are solved at the expense of the animals rather than by abandoning deleterious practices.

### **3. DE-BEAKING OF HENS**

A significant proportion of the UK's egg laying hens are de-beaked. The industry asserts that this mutilation is necessary to prevent feather-pecking and cannibalism but, as will be seen, other measures can be taken to prevent these 'vices'.

De-beaking involves the partial amputation of the hen's beak. A red-hot blade is used to slice off as much as one-third to one-half of the upper, and sometimes also the lower, part of the beak. One de-beaker in commercial use consists of a metal bar on which the beak is placed. An electrically heated blade is brought down on the beak, cutting through it and cauterising the stump at the same time. Sometimes the operation may be incorrectly performed with too much beak being removed; in the worst cases, the beak can be cut back nearly as far as the nostrils.

### 3.1 The pain involved

It is sometimes suggested that de-beaking is similar to and no more painful than the cutting of finger-nails or toe-nails for humans. This is a false analogy. The European Commission's Scientific Veterinary Committee (SVC) has described de-beaking as a "serious mutilation". After examining the scientific evidence they concluded that the operation is painful and that birds may suffer persistent pain following de-beaking due to the presence of neuromas (SVC, 1992). (A neuroma is a swelling on a nerve).

The SVC added that hens should be housed and managed in such a way that de-beaking is not necessary. They recommended that de-beaking "should be banned as soon as practicable since it is known to cause pain both during and after the operation".

Similarly the Farm Animal Welfare Council (FAWC, 1991) concluded that de-beaking "is a serious welfare insult to the hen and can result in chronic pain for long periods after the operation". The FAWC stressed that de-beaking should not be necessary in a well-managed system where the hens' requirements are fully met. In the light of their findings the FAWC recommended the immediate introduction of legislation to require the banning of all routine, non-therapeutic de-beaking by 1996.

The impact of de-beaking on hen welfare is vividly illustrated by a study carried out by Gentle et al (1990). This found that amputation results in significant changes in the behaviour of the birds. After de-beaking the hens spent less time pecking and drinking than before. Gentle interpreted this as an attempt to guard a painful area of the body (similar behaviour can be seen in humans and other mammals).

Such guarding behaviour was also used by Gentle to explain why after amputation, hens reduced the amount of head shaking and beak wiping which they performed. Head shaking and beak wiping are associated with feeding and drinking; their purpose is to remove particles of food from the mouth or the surface of the beak. Indeed another study by Gentle has shown that partial beak amputation leads to feeding difficulties for hens (Gentle et al, 1982). In particular, food intake was reduced and this was accompanied by a fall in body weight.

Damage to and pain in and around a hen's beak entail serious consequences for the bird. A significant range of behaviour will be inhibited. Gentle et al (1990) explain that:

"The avian beak is a complex sensory organ which not only serves to grasp and manipulate food particles prior to ingestion, but is also used to manipulate non-food articles in nesting behaviour and exploration, drinking, preening ..."

We have already seen how de-beaking leads to feeding difficulties and a reduction in pecking, head shaking and beak wiping. Another study found that after de-beaking there was a decrease in the time spent feeding, drinking and preening, all activities which directly involve use of the beak (Duncan et al, 1989). The authors concluded that the substantial decrease in activities involving the beak suggests that the birds are suffering severe pain. This probably lasts for three to five weeks but may last longer.

Gentle et al (1990) added that it has been reported that partial beak amputation "results in long-term increases in dozing and general inactivity (Eskeland, 1981), behaviours associated with long-term chronic pain (Wall, 1979) and depression (Fraser and Quine, 1989)".

The evidence that de-beaking causes pain is not just behavioural but also neurological. Gentle (1986) has shown that after de-beaking extensive neuromas form in the healed stump of the beak. He concluded that the presence of neuromas together with abnormal neural activity raises welfare questions about de-beaking. The neuromas may well be painful for the rest of the bird's life (Broom, 1992).

Chickens have nociceptors (sensory pain receptors) in the beak, with response characteristics similar to those of mammals (Gentle, 1989). Broom (1992) points out that, in the light of this, any trimming operation must be painful.

Gentle et al (1990) add that partial beak amputation is likely to be a painful procedure leading, amongst other things, to phantom and stump pain. Their results suggest that hens may experience some of the long-term painful complications seen in humans following amputation.

Indeed the case against de-beaking has been implicitly accepted by the Ministry of Agriculture's Code of Practice (MAFF, 1987). This stipulates that de-beaking "should be carried out only as a last resort".

### **3.2 Alternatives to de-beaking**

So, why does the industry continue routinely to de-beak a large number of hens? The usual justification is that de-beaking prevents feather-pecking and cannibalism. However, as will be seen, these activities can be prevented by improving the conditions in which hens are kept. De-beaking is not necessary as has been recognised by both the European Commission's Scientific Veterinary Committee (SVC) and the Farm Animal Welfare Council (FAWC).

As indicated above, the SVC (1992) has stressed that:

"Hens should be housed and managed in such a way that beak trimming is not necessary".

A similar conclusion has been reached by Professor Donald Broom, Professor of Animal Welfare at the University of Cambridge (Broom, 1992).

The FAWC (1991) too has concluded that:

"beak-trimming should not be necessary in a well-managed system where the hens' requirements are fully met".

What kind of housing could remove the perceived need for de-beaking? The provision of extensive litter areas combined with low stocking densities and low flock sizes could go a long way to reducing feather-pecking and cannibalism.

It has been found that feather pecking is mainly performed when hens are unable to a) peck at the ground and b) dust-bathe.

In natural conditions hens spend long periods pecking at the ground for food. Where hens are unable to food-peck, that behaviour may be "mis-directed" into feather pecking (Blokhuys and Arkes, 1984). The researchers divided hens into four groups, two being housed on litter, and two being kept without litter. They found a higher frequency of feather pecking (and a more damaging character of pecking) in the non-litter groups; most of these birds had

severely damaged plumage, while the plumage of all the birds kept on litter was in perfect condition.

The authors concluded that: “food pecking behaviour can easily lead to feather pecking and feather eating. The hypothesis that this development is more likely when ground-scratching and [ground]-pecking are frustrated by lack of an appropriate litter substrate seems obvious. In the latter situation, feather pecking evolves as “misdirected” ground-pecking. The results from the present experiments strongly support this view”.

The Farm Animal Welfare Council’s Minority Report on colony systems for laying hens (FAWC Minority Report 1991) cites a number of studies showing that there is a considerable reduction in feather pecking when other materials to peck at are provided (studies cited include Norgaard-Nielsen, 1989; Blokhuis, 1986).

Hens are strongly motivated to dust-bathe. When dust-bathing the birds lower themselves to the ground using their feet to spray themselves with dry dust. Once they have rubbed this into their plumage, the hens shake themselves rather like a wet dog, thereby getting rid of excess oil and parasites.

It has recently become clear that when hens are prevented from dust-bathing, they may well re-direct that behaviour into pecking the feathers of fellow birds. Vestergaard (1989), for example, found that birds who were provided with litter (which enables them to dust-bathe) and perches displayed more than 2.5 times less aggressive pecking as compared with birds kept without litter and perches. Broom (1992) has said “it seems that adequate litter on the floor can solve the feather-pecking problem”.

The FAWC Minority Report (1991) stressed that de-beaking attacks the symptoms rather than the root causes of feather pecking. Clearly if hens are kept on litter, they are able to peck at the ground and dust-bathe and thus two “root causes” of feather pecking are addressed in a positive manner.

Broom (1992) emphasised that in addition to providing environments with extensive litter areas, it is important to ensure a stocking density that is not too high.

Stocking densities in many colony systems are extremely high. There is no welfare law regulating stocking densities other than for battery cages. However, EC marketing regulations lay down maximum stocking densities for colony systems. These regulations permit hens to be stocked at very high densities. In percherries as many as 25 hens can be kept in one square metre of floor space; in deep litter systems 7 hens can be kept in one square metre. Free range hens are given interior housing and this can be stocked at 25 hens per square metre. Compassion in World Farming Trust believes that much lower stocking densities should be insisted on by law.

In the longer term, some experts believe that the problem could be addressed by genetically selecting birds which are not prone to feather pecking and cannibalism. However, as Duncan (1980) pointed out:

“it is not worthwhile for commercial companies to select against [feather pecking and cannibalism] as long as they are allowed to take short term solutions. As long as they are allowed to cut off the beaks of birds [and] turn down the lights until the birds are in almost total darkness, why select? Short term controls are available. Steps could be taken to make

them take this into account in their selection programmes simply by prohibiting some of these short term solutions”.

In conclusion, the proper response to feather pecking and cannibalism is not to mutilate the hens to make them fit unsatisfactory systems. Rather we should abandon the impoverished systems which currently dominate the poultry industry. Not only should the use of the battery cage be ended; so too should colony systems which stock birds at such high densities and in such large groups that welfare problems are inevitable.

## **4. TURKEY MUTILATIONS**

### **4.1 De-beaking**

Some 25% of the British turkey flock is de-beaked. This mutilation is performed with a hot cauterising blade or a sharp pair of secateurs or scissors. The upper beak is cut back, sometimes to just in front of the nostrils. There is no reason to think that this operation inflicts less pain on turkeys than it does on hens. Indeed, Hocking (1993) writes that the results of the experiments carried out to date suggest that turkeys experience chronic pain for at least 2-6 weeks after the operation.

Turkeys are de-beaked to prevent damage from fighting. The operation is mainly carried out on breeding birds and turkeys kept in pole barns. These are frequently overcrowded but have natural light being open on one side (although enclosed with wire netting).

As compared with other poultry, the turkey has been domesticated only relatively recently and can be aggressive. Compassion in World Farming Trust believes that the solution to this should be sought not in de-beaking but in keeping turkeys free range with plenty of space and in very small flocks. The practice of keeping turkeys indoors in highly overcrowded conditions is invariably accompanied either by de-beaking or by birds being kept in very low light levels, both of which practices are totally unacceptable.

### **4.2 Toe-cutting**

On some farms part of the turkey's toe is amputated. Hocking (1993) writes that 1, 2 or 3 toes are removed at the junction of the first and second digit or at the end of the nail. Turkeys may scratch each other either when they crowd into a small area (which they may do, for example, when frightened) or during catching and transportation to the slaughterhouse. The purpose of toe-cutting is to avoid carcass down-grading due to scratches.

The results of a number of studies suggest that the operation is painful (Owings et al, 1972; Newberry, 1991, 1992). As many producers do not toe-cut, the mutilation can hardly be viewed as necessary. Compassion in World Farming Trust believes that toe-cutting should be prohibited as the remedy to scratching lies in ending the use of overcrowded, intensive housing, and in exercising proper care during catching and transportation.

### **4.3 De-snooding**

Some producers remove the snood from breeding turkeys to prevent it being damaged during fighting. This is done by pinching the thumb and fingers together at the base of the snood and pulling it off. This is presumably painful as the snood is supplied with nerves. Rather

than removing the snood, producers should keep turkeys in systems which do not provoke fighting.

## **5. LAMB MUTILATIONS**

Some 20 million lambs are reared in the UK each year. The majority of all male lambs are castrated. Moreover, the majority of lambs of both sexes have part of their tails cut off (docked); such tail amputation is a routine procedure on many lowland sheep farms. Both these mutilations inflict pain on lambs (FAWC, 1994).

### **5.1 Castration methods**

Castration is performed by one of the following methods:

- 1) A tight rubber ring is placed at the neck of the scrotum. This cuts off the flow of blood to the scrotum and testicles which then fall off after a few weeks.
- 2) A bloodless castrator, such as the Burdizzo, is used to crush the spermatic cord. The blood supply to the testicles is damaged and this leads to atrophy of the testicular tissue.
- 3) Surgical castration. The scrotum is cut open with a sharp knife and the testicles are pulled out. The Farm Animal Welfare Council Report on the welfare of sheep (FAWC, 1994) warns that “hazards associated with this procedure include haemorrhage, prolapse of the intestines through the open scrotal wound and subsequent potential for infection of the wound”.

### **5.2 Tail-docking methods**

Tail-docking is performed by one of the following methods:

- 1) A rubber ring is placed some 10 cm. from the base of the tail. This cuts off the blood supply and the lower half of the tail falls off after a few weeks.
- 2) A sharp knife is used to cut off the lower half of the tail. FAWC (1994) warns that “there is haemorrhage which very occasionally may be fatal and there is also a risk of infection of the exposed stump”.
- 3) A hot iron is used to sever and cauterise the tail; the risk of haemorrhage is reduced by this method.

### **5.3 Pain involved**

One major study examined the changes in behaviour induced in lambs after various methods of castration and tail-docking carried out at the ages of 5, 21 and 42 days (Molony et al, 1993). The methods used included rubber rings, application of a Burdizzo clamp in addition to a rubber ring, and surgical castration together with cutting off the lower part of the tail with a sharp knife. The authors concluded that:

“all methods at all ages produced changes in behaviour which were interpreted as indicative of considerable pain”.

The researchers found that as compared with other methods of castration and tail-docking, the use of the rubber ring led to significantly greater increases in the time spent in restlessness and abnormal postures. (The authors contend that increases in restlessness or abnormal postures indicate an increase in pain).

They concluded that rubber rings produce more pain at all ages than the other methods. This finding is particularly pertinent as the rubber ring is the method of castration and tail-docking most commonly used in the UK. French (cited in French and Morgan, 1992) found that over 90% of sheep farmers docked tails by the application of a tight rubber ring; Molony et al (1993) assume that the rubber ring is used to castrate a similar percentage of male lambs.

Mellor and Murray (1989) examined the behavioural and cortisol responses of lambs to castration and tail-docking by the application of tight rubber rings. They found that lambs who were castrated and tail-docked by rubber rings suffered painful experiences which were characterised by the authors as “marked distress”. Wood et al (1991) concluded that young lambs subjected to rubber ring castration and tail-docking experience intense pain and distress.

The studies cited in the previous paragraph examined the acute (short-term) level of pain experienced by lambs who are castrated and tail-docked. French and Morgan (1992) studied the chronic (long-term) effects of tail amputation in lambs. They pointed out that chronic pain has been reported following amputation of peripheral nerves, including tail-docking in dogs.

The authors examined the nervous system in docked lambs’ tails and concluded from the presence of terminal neuromata and irregular innervation (the nerve supply to an area of the body) that chronic pain may be present long after amputation.

The Farm Animal Welfare Council’s Report (1994) stated:

“We are concerned about the present position regarding tail-docking and castration. We consider that both, without anaesthesia, inflict pain on the lamb”.

They added that there is no doubt that lambs feel pain and distress as a result of castration and tail-docking. As regards the most painful method, the FAWC takes a different view from Molony et al (1993). The FAWC reports that surgical castration, which involves the tearing of tissue, causes significantly more distress and for a longer period than the other methods.

## **5.4 Anaesthesia**

It should be noted that the vast majority of castration and tail-docking is performed without any anaesthetic. The FAWC Report points out that general anaesthesia is hazardous and requires skill to administer. They do not consider its use to be appropriate in the on-farm situation.

Local anaesthesia for castration can be performed reasonably simply. More than one injection is, however, required for effective anaesthesia and infection can result where the injection is given in conditions which are not clean. This can be serious as the spermatic cord leads directly into the abdominal cavity.

A local anaesthetic for tail-docking can be given by an injection into the spinal canal. Such injections are, however, difficult to perform and carry a high risk of proving to be ineffective

as the injection site is very precise. There is, moreover, a significant danger of infection being introduced into the spinal canal.

The law only requires an anaesthetic to be used for castration where the lamb is over three months old, except where a rubber ring is used and then an anaesthetic must be given after the first week of life (the Protection of Animals (Anaesthetics) Acts 1954 and 1964 as amended).

The Ministry of Agriculture guide to legislation (MAFF, 1991) states that it is a grey area legally as to whether or not an anaesthetic is needed for tail-docking a lamb.

The 1994 FAWC Report recommends that the use of an anaesthetic should be obligatory for the castration and tail-docking of lambs over six weeks of age. They also recommend making an anaesthetic obligatory for surgical castration at any age.

## **5.5 Castration and tail docking – unnecessary mutilations?**

Lambs are tail-docked as it is believed that this reduces the risk of blowfly strike by decreasing the amount of faeces which gathers on the wool around the tail.

The reason normally given for castration is that once male lambs reach sexual maturity they become difficult to manage. This is because they will tend to breed indiscriminately and are prone to fighting while a dominance hierarchy is being established. Moreover, it is believed that rams (uncastrated adults) produce meat of an inferior quality.

However, the need to carry out these mutilations received a powerful challenge from the 1994 Report of the Farm Animal Welfare Council. This said that:

“we wish to state that all farmers should consider carefully the necessity for performing any mutilation on sheep and we hope that as many as possible will choose to avoid tail docking and castration”.

Increasingly lambs are being slaughtered before they reach the age of sexual maturity. Moreover, the demand for lean meat is increasing, whereas castration will tend to produce fat. In the light of such factors the FAWC stresses that “it is likely that many lambs which would normally be routinely castrated and docked need not be subjected to these procedures”.

Most damning of all the FAWC states that:

“It is difficult to give general approval to any system of husbandry that relies on painful mutilations to sustain the system....”.

## **6. CATTLE MUTILATIONS**

### **6.1 Castration**

A high proportion of male calves being reared for beef are castrated. Castration is carried out in one of the following ways:

1. A rubber ring or other device is used to restrict the flow of blood to the scrotum;

2. Surgical castration;
3. Bloodless castration, i.e. a Burdizzo is used to crush the spermatic cord of each testis.

For calves aged less than 2 months, surgical and bloodless castration can be performed without anaesthetic and by a non-vet (Protection of Animals (Anaesthetics) Acts 1954 and 1964 as amended; Veterinary Surgeons Act 1966 as amended). The rubber ring method can only be used in the first week of life without an anaesthetic.

Robertson et al (1994) used changes in behaviour and plasma cortisol to assess pain and distress in calves after castration. Calves aged 6, 21 and 42 days were castrated by rubber ring, Burdizzo or surgical techniques.

The authors concluded that irrespective of age, all three methods of castration appeared to cause acute pain.

They added that the results obtained made it difficult to decide whether rubber ring or surgical castration is the more painful method. As regards Burdizzo castration, they suggested that the pain may be more intense, but of shorter duration than that caused by rubber ring castration.

Turning to the three ages examined, the authors concluded that calves suffered pain after castration at each age. They added that the 6 day old calves probably suffered the least pain, whereas the 42 days old calves may have suffered the most. It should be noted that in practice many calves are surgically castrated when they are about 7 weeks old (at this age an anaesthetic is not compulsory).

Given that castration is painful, the key question is whether it is necessary. Many cattle reach their slaughter weight before the age of eighteen months (the age of sexual maturity). There can be no justification for castrating cattle which are to be slaughtered before reaching sexual maturity.

## **6.2 Dehorning and disbudding**

The horns are often removed from both dairy cows and beef cattle in order to avoid the risk of animals injuring each other. Young animals can be disbudded, i.e. the horn bud is removed to prevent the growth of horns. Once, however, the horns are well established, dehorning is the only way of removing them.

The most common method of disbudding is to kill the horn-forming tissues by applying a hot iron to the horn bud when the calf is 4-6 weeks old. This device is similar to a soldering iron. A local anaesthetic must be used (Protection of Animals (Anaesthetics) Acts 1954 and 1964 as amended) but once it wears off the wound may be painful for some days.

Dehorning is a major procedure. The horns are cut off with a saw, horn shears or cutting wire. Once the horns have been removed, the blood vessels must be cauterised (the horn contains both blood vessels and nerves). A local anaesthetic must be used, but dehorning may be carried out by a non-vet.

Both disbudding and dehorning are painful procedures. Both require restraint which is itself stressful. Both could be avoided. The risk of cattle injuring each other is much greater when they are housed intensively indoors. Compassion in World Farming Trust believes that the

move towards intensification should be reversed as animals reared free-range are less likely to damage each other with their horns.

Some experts believe that where horns present a danger, a possible solution lies in using polled (i.e. without horns) breeds of cattle and/or by introducing polledness into the animals by breeding, i.e. by breeding from hornless strains. This is clearly a much more humane approach than subjecting cattle to disbudding or dehorning.

## **7. CONCLUSIONS**

### **Pigs**

1. Tail-biting in pigs can be caused by a number of factors. These include a) keeping young pigs in overcrowded and barren intensive housing systems and b) early weaning.

Compassion in World Farming Trust believes that tail-docking should be prohibited altogether. Instead of mutilating pigs to make them “fit” impoverished systems, the industry should keep pigs in an environment which gives them ample space and enables them to perform foraging and exploratory behaviours.

The sole purpose of early weaning is to enable sows to be put in pig again with the minimum of delay. Early weaning imposes stress on piglets and has been identified as a factor leading to tail-biting. Compassion in World Farming Trust believes that the practice of early weaning should be ended.

### **Hens**

2. De-beaking is painful to hens at the time of the operation and can result in chronic pain for long periods. Indeed de-beaking may well lead to pain for the rest of the bird’s life.

The European Commission’s Scientific Veterinary Committee (SVC) has stressed that hens should be housed and managed in such a way that de-beaking is not necessary. The Farm Animal Welfare Council (FAWC) has recommended that all routine non-therapeutic de-beaking should be banned by 1996.

Compassion in World Farming Trust fully agrees with the SVC and the FAWC, believing, as with pigs, that hens should not be mutilated to make them fit inadequate systems.

### **Lambs**

3. Both castration and tail-docking inflict considerable pain and distress on lambs. The FAWC has urged all farmers to consider carefully the necessity for performing any mutilation on sheep and expressed the hope that as many as possible would choose to avoid tail-docking and castration.

Compassion in World Farming Trust believes that the castration of lambs should be prohibited except where a veterinary surgeon certifies that the mutilation is necessary for therapeutic reasons. In such cases the use of an anaesthetic should be compulsory.

## Overall conclusions

4. With pigs, with hens and with turkeys, we see a pattern whereby intensive systems are developed which frustrate most of the animals' normal behaviour and which force them to live in totally unnatural conditions. Not surprisingly, the stressed animals develop fresh behaviours as a substitute for those which have been denied and/or they become aggressive. These developments are labelled "vices" which are then controlled by mutilating the animal. To the welfare insult of the intensive farm is added the injury of mutilation. Instead, intensive systems should be discarded and we may then see "vices" fall away and with them the perceived need for many mutilations.
5. Compassion in World Farming Trust wholeheartedly agrees with the Farm Animal Welfare Council's statement that "it is difficult to give general approval to any system of husbandry that relies on painful mutilations to sustain the system". Systems which cannot be run without mutilating the animals are in need of a radical rethink. They should be modified so that the need for mutilations no longer arises; failing that, they should be abandoned.

PETER STEVENSON

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