



GAMEBIRD REARING

COUNTRYSIDE ALLIANCE AND GAME FARMERS' ASSOCIATION BRIEFING NOTE

Contents

Summary	1
What are Laying Units?	2
The Game Rearing Process	3
The Importance of Game Rearing and Raised Laying Units	4
The Existing Code of Practice	5
Research into Raised Laying Units and Welfare	6
Anti-Pecking Devices	7
Conclusion.....	7

Summary

- The rearing of pheasants and partridges for shooting requires the use of laying units such as floor pens and raised units. Both practices are covered by extensive animal welfare legislation and a statutory Code of Practice. Virtually all partridges and approximately 75% of pheasants reared in the UK hatch from an egg laid in a raised laying unit (RLU).
- Wild populations of pheasants and partridges exist throughout the UK and the release of reared birds for shooting has a “benign or positive”¹ impact on the countryside.
- Defra commissioned research, published in 2015, showed that pheasants appeared more “relaxed and content” in RLUs than in floor pens, and partridges appeared more “relaxed and content” in larger, enriched RLUs.
- Rearing gamebirds is an essential part of the shooting sector, the game market and the wider conservation of the countryside.
- Shooting is worth £3.3 billion to the UK (mostly rural) economy (GVA) and supports the equivalent of 67,000 full time jobs.² 83% of shoots rely to some extent on reared game birds.³

¹ Draycott, R.A.H., Hoodless, A.N. and Sage, R.B. (2008) *Effects of pheasant management on vegetation and birds in lowland woodlands*. Journal of Applied Ecology, 45. pp. 334-341

² Cognisense, 2024. *The Value of Shooting*

³ Game Farmers' Association. 2008. *Game Farming in the UK*

- The UK rears between 25-30 million pheasants* and 9-11 million partridges (mostly red-legged)* every year for shooting. Cognisense in The Value of Shooting report figures show that 95% of shot game meat enters the food chain.⁴ This is compared to well over 1 billion broiler chickens which are reared every year solely for the purpose of meat production.⁵
- The shooting industry's assurance scheme, Aim to Sustain Assurance, has recently expanded its auditing to game farms, further ensuring the highest welfare possible and adherence to codes of practice. There is also a new scheme called Trusted Game, designed and operated by specialist game-bird vets. This is a Health and Welfare Accreditation scheme aimed at shoots and game-farms and is quickly becoming more widespread throughout the sector. It has a module specifically covering breeding.
- The 2010-12 Defra research confirms that properly managed RLUs are often the safest and healthiest way to house birds during the laying stage of game rearing. In short, they offer:
 1. Better protection from disease
 2. Better protection from the elements
 3. Better protection from predators
 4. Better quality, healthier eggs
- We hope that Government will take forward this research into any revised Code of Practice, to ensure the highest standards of animal welfare in this area are maintained in line with the best scientific evidence.

What are Laying Units?

Laying units are used during the laying stage of the game rearing process and they house the breeding birds throughout the breeding season, usually for a period of 12-16 weeks.

The two main types of laying units are i) floor pens, and ii) raised units:

- i) **Floor pens:** Outdoor enclosures placed on the ground with grass/bare soil floor. Typically timber framed, with wire mesh cladding on the sides and a roof net. The pens have enclosed nesting boxes or covered nesting areas but are mainly open to the elements. Some eggs are laid in the nesting boxes, but many aren't. Any laid on the floor of the pen will be exposed to varying levels of contamination depending on the ground conditions, thus compromising egg hygiene. It is not viable to discard these eggs as they may make up more than 50% of total production. Eggs are collected manually once or twice a day and disturbance of the birds is unavoidable. The longer the eggs remain on the floor the more contaminated they may become but the more frequently they are collected the more disturbance the birds experience. The size of such units varies but can be anything from 8-10 birds up to 200 or more in a single unit, at a recommended stocking density of 4-5 sqm per bird. Floor laid eggs always require washing. Floor based systems are generally only suitable for pheasants.

N.B. The commercial poultry industry claims not to set **any** floor laid eggs, in the interests of egg hygiene and disease management.

⁴ Cognisense, 2024. *The Value of Shooting (2022 data)*

⁵Food and Agriculture Organisation of the United Nations, <http://faostat3.fao.org/download/Q/QL/E>

*2022/2023 data

- ii) **Raised laying units (RLUs):** Outdoor enclosures raised above the ground with a wire mesh floor. Typically metal framed with metal cladding on the sides and a flexible mesh roof. The units have an enclosed nesting box or covered nesting area. Eggs are laid off the floor and the enclosure is designed so that they roll away to a collection point at the front of the unit where they can be easily retrieved with the minimum of disturbance to the birds. Eggs laid in RLUs rarely require washing. RLUs are suitable for pheasants and partridges (although the design will be substantially different for each species). Space requirements are lower than for floor-based systems as ground contamination is not an issue and stocking densities will vary according to the species housed and the exact nature of the system.

RLUs normally include enrichment such as perches, privacy curtains, pecking blocks and similar elements designed to allow birds to express natural behaviour. The existing statutory Code of Practice states that RLUs without enrichment, known as 'barren cages', "should not be used"⁶ and their legality would also be doubtful under the ['five freedoms'](#) incorporated in the Animal Welfare Act 2006.

There are two fundamental advantages to raised units from a health and welfare perspective.

1. The health of the breeding birds is better in raised units as they do not come into contact with contaminated ground conditions. This results in a lower incidence disease.
2. Eggs produced in RLUs are always cleaner than floor laid eggs and the likelihood of egg-borne disease which may be passed on to the chicks will be significantly lower (e.g. yolk sac infection, rotovirus etc.)

Both of these factors have an impact on antibiotic use within the Game Sector. Over the last eight years the Game Farmers' Association (GFA) has developed, implemented and led a hugely successful campaign to reduce antibiotic use in the Game Sector in response to government calls for livestock sectors to play their part in protecting human and animal health from the build up of anti-microbial resistance (AMR). If left unchecked AMR was predicted by the World Health Organisation to be responsible for more human deaths in the world than cancer by the year 2050. The Game Sector has voluntarily reduced its consumption of antibiotics by over 70% since 2015, a success that has been the subject of a United Nations Case Study into Sustainable Farming and has been examined by De Sante (EU Directorate-General for Health and Food Safety) in a visit to a UK Game Farm (owned and run by GFA Health and Welfare Chairman) in June 2018. This success would not have been possible without the use of RLUs and any legislation which prevents their future use will seriously compromise the Game Sector's ability to contribute to further reductions in antibiotic use and could even undermine those already achieved. It will almost certainly make it impossible for the Game Sector to meet the targets already agreed with the Responsible Use of Medicines in Agriculture Alliance (RUMA) Targets Task Force 2.

The Game Rearing Process

The game breeding season starts in February when adult birds are placed in laying units, either RLUs or floor pens, for mating and egg production. Eggs are collected daily from April onwards and are hatched in electronic incubators. Consistently, operators report that better results are achieved when birds are placed in their laying units earlier such as in November or December compared to being placed in January or February.

Birds are generally housed in laying units for a period of 12-16 weeks during this process although this can sometimes be longer, depending on factors such as the weather, age and

⁶ Defra, 2010. *Code of Practice for the Welfare of Gamebirds Reared for Sporting Purposes*

condition of the birds, and the type of system being operated. Birds may also be placed in laying units earlier in order to protect them from contact with wild birds during an Avian Influenza outbreak.⁷

Once the eggs have hatched, the chicks are placed in rearing pens in which heat, food and water are provided. The availability of outdoor space increases as the chicks grow in size and resilience. Once pheasants are reared to approximately 6-8 weeks old, or 12 weeks old for partridges, the chicks, known as 'poult', are introduced to the natural environment using 'soft release' techniques including release pens to protect them from predation and the provision of feeders to provide supplementary food.

Over time the birds adapt to the natural environment and disperse into the surrounding habitat. Birds previously kept for laying will also be released at the appropriate time depending on weather conditions, age and condition of the birds and type of laying unit being used, with replacement birds being kept back from that year's chicks. Shooting will begin no less than one month after the birds are released, with 95% of shot birds entering the food chain. Not all of the birds released will be shot and the remainder will remain wild, with some breeding naturally the following spring, contributing to the wild population.

Self-sustaining wild populations of pheasants have existed throughout the UK since the 15th Century following earlier attempts at introduction by the Romans.⁸ Pheasant rearing and releasing causes no major differences in invertebrate abundance⁹ and has a "benign or positive" impact on vegetation structure and bird communities in woodlands.¹⁰ Grey partridges are native to Britain and wild Red-legged Partridge populations have existed since the 17th Century. The argument that pheasants and red-legged partridges are "alien species" to the UK is misleading as both species are well established and are a common sight in the British countryside. Both the Common Pheasant and the Red-legged Partridge are recognised as "naturalised" species in the UK.

The Importance of Game Rearing and Raised Laying Units

Game rearing, game shooting and game consumption are part of a well-established and sustainable shooting cycle and form a key part of the broader management of the countryside and the wildlife sustained by it. To understand the importance of game rearing it is necessary to understand the value of game shooting and game consumption, and the contribution it makes to conservation. The recent Cognisense The Value of Shooting report found that:

- Shooting is worth **£3.3 billion** annually to the UK economy (GVA), generates **£9.3 billion** of wider economic activity in the UK economy, and supports the equivalent of **67,000 full time jobs**.¹¹ 83% of game shoots rely to some extent on reared game birds.¹² The UK rears between 25-30 million pheasants and 9-11 million red-legged partridges for shooting every year.¹³ The majority of this rearing is done by the UK's approximately 300 game farms.¹⁴
- **95%** (2022 data) of shot game meat enters the food chain. Pheasant and partridge are some of the most ethically sourced meat available, with high levels of iron, protein and vitamin B. Sales of game meat exceeded **£100 million** in 2015.

⁷ Game Farmers' Association. 2010. *Raised Laying Units for Gamebirds*

⁸ GWCT, 2015. *To Bit or Not To Bit?*

⁹ Neumann, J., Holloway, G., Sage, R. and Hoodless, A. (2015) *Releasing of pheasants for shooting in the UK alters woodland invertebrate communities*. Biological Conservation, 191. pp. 50-59

¹⁰ Draycott, R.A.H., Hoodless, A.N. and Sage, R.B. (2008) *Effects of pheasant management on vegetation and birds in lowland woodlands*. Journal of Applied Ecology, 45. pp. 334-341

¹¹ Cognisense, 2024. *The Value of Shooting*

¹² Game Farmers' Association. 2008. *Game Farming in the UK*

¹³ 2018/2019 data

¹⁴ Game Farmers' Association. 2008. *Game Farming in the UK*

- **14 million** workdays are undertaken each year on conservation for shooting in the UK. The work carried out by shoot providers often complements that of other conservation organisations and benefits the wider habitat and wildlife sustained by it. Habitat management and conservation are carried out on **7.6 million hectares** as a result of shooting.¹⁵

RLUs are an important part of the game rearing process and when used in accordance with the Code of Practice and industry guidance they often have distinct welfare benefits for the birds housed in them.

Partridges pair for the breeding season and cock birds often become protective of their mate and aggressive towards other cock birds during the breeding season. Placing one cock partridge and one hen partridge in a raised laying unit prevents potential harm to the birds from conflict between cock birds. RLUs also have the advantage of maintaining a cleaner environment as the wire mesh floor allows droppings to fall through to the ground below, ensuring less disease in both the birds and the eggs they produce. They also keep the laying birds in cleaner condition, especially in bad weather. The Defra research (2015) showed that partridges appeared more “relaxed and content” in enriched raised laying units.

Pheasant laying units use a harem system, in which 8-12 hens are penned with one cock bird. In the UK it was historically far more common for this mating system to be housed in a floor pen, similar to those used to maintain a flock over winter. More recently however RLUs have begun to be used for pheasants in the UK as the significant benefits of this type of laying unit have been shown by game farmers in Europe to be applicable to pheasant rearing.

The Existing Code of Practice

In 2010 Defra produced a statutory [Code of Practice for the Welfare of Gamebirds Reared for Sporting Purposes](#) under the provisions of the Animal Welfare Act 2006. The Code sets out best practice for gamebird rearing in husbandry, housing and penning and ensures high welfare standards are set. As a statutory code, it can be used as evidence in court to support a prosecution for poor welfare. Failure to comply with the Code tends to liability. The Code specifically states that:

“Barren raised cages for breeding pheasants and small barren cages for breeding partridges should not be used. All laying systems used for the housing of birds should be designed and managed to ensure the welfare of the birds. Any system should be appropriately enriched.”¹⁶

The recommendations in the Code have been transposed into the GFA’s own guidance on the use of raised laying cages. All GFA members are expected to provide enriched laying units, following this guidance:

“As a general principle, the welfare of birds should be judged by health and behavioural outcomes rather than by physical inputs. What really matters is the condition and well-being of the birds not the precise nature of their housing. It is easy to get obsessed with providing perches, pecking devices, nest areas and other ‘furniture’ inside the units and indeed the ‘enrichment’ provision of the codes may require this. But make sure that what you are using by way of additional furniture really works to enrich the lives of the birds. Enrichment is a welfare issue, not a box-ticking exercise.”¹⁷

The statutory Code of Practice was due for review in 2016 and the Minister had committed to consult with industry and animal welfare organisations as part this review. Research was

¹⁵ Cognisense, 2024. *The Value of Shooting*

¹⁶ Defra, 2010. *Code of Practice for the Welfare of Gamebirds Reared for Sporting Purposes*

¹⁷ Game Farmers’ Association. 2010. *Raised Laying Units for Gamebirds*

commissioned by Defra in 2010 to determine what methods of enrichment are most appropriate for pheasants and partridges, and the conclusions of this work, published in 2015, should form the basis for any further revision of the Code.

Research into Raised Laying Units and Welfare

In 2010 Defra commissioned an independent study “to determine whether cage-based breeding can meet the needs of gamebirds, and if not, to identify best practice.”¹⁸ The study assessed the benefit of enrichment for bird welfare as well as testing different sizes of laying unit. Pheasants and partridges were observed for a 12-week period during the breeding season with various configurations of enrichment in different sizes of laying unit, including pheasants housed in grass-based floor pens. Their welfare was assessed using measures of claw length, foot health, feather condition, presence of parasites and causes of mortality, while their ability to express behaviour was also assessed through a qualitative behavioural analysis.

The [Final Report](#) was published in July 2015 and the results are summarised below:

Pheasants

- Birds appeared more “relaxed and content” in raised laying units than floor pens.
- The size of the laying units had no significant impact on the measures of welfare.
- The presence of enrichment in the laying units had no impact on welfare measures.
- Birds in both raised laying units and floor pens became increasingly “relaxed and content” as the study progressed.
- Egg production was significantly poorer in floor pens.

The research clearly indicates that pheasant welfare is at least as well served by raised laying units as it is by floor pens, regardless of enrichment.

Partridges

Partridges in enriched raised laying cages appeared more “relaxed and content” compared to units without enrichment, known as ‘barren units’.

- Enrichment only had a positive impact on bird welfare at larger space allowances.
- Birds became increasingly “relaxed and content” as the study progressed.¹⁹

The research suggests that larger, enriched raised laying units are required in order to ensure the welfare of partridges.

The difference between the pheasant and partridge results may be attributable to the difference in mating systems. The pheasant harem system appears to require less enrichment, possibly due to the larger number of birds able to interact with one another within the same laying unit. Partridge laying units house only two birds, one cock and one hen. Unlike pheasants, partridges pair for the season and so a harem system would be inappropriate, and placing multiple pairs in one laying unit would result in violent competition between cock birds with severe welfare implications. The Defra research showed that enrichment was more effective in improving observed welfare standards in larger units but was not able to examine all configurations and further research is necessary to be certain of the optimum space allowance. In the wild, red-legged partridge cock birds sometimes pair with two hens and trios have been experimented with, although no valid scientific research has been undertaken. This is another area where further research would be useful.

These findings support the existing Defra Code of Practice and the GFA's own guidance on this, which states: “*Barren raised cages for breeding pheasants and small barren cages for*

¹⁸ Defra, 2015. *Project Code AW1303*

¹⁹ Defra, 2015. *Project Code AW1303*

breeding partridges should not be used. All laying systems used for the housing of birds should be designed and managed to ensure the welfare of the birds. Any system should be appropriately enriched[...]

*Gamebird keepers should explore possible methods of enrichment with their veterinary surgeon or other suitable adviser. Laying birds should be provided with nest areas sufficient for the number of birds housed.*²⁰

Anti-Pecking Devices

Some opponents of RLUs have attempted to make a false link between this type of laying unit and the use of a plastic ring applied to the beak to prevent birds from pecking one another, known as a 'bit'. Much like poultry, gamebirds in captivity have a tendency to feather peck. Even in extensive free range poultry systems feather pecking is a major welfare issue and beak trimming is commonplace in the rearing of broiler hens for meat production. In the gamebird rearing sector, short-term solutions are required due to the short amount of time that birds spend in captivity before release. Beak trimming, as practised in the poultry industry, is very rarely used in game rearing as the birds need to be released into the natural environment with their beaks intact.

The 2010-12 Defra research (report published 2015) also looked at the practice of using bits and concluded there was no link between the use of RLUs and the practice of 'bitting'. Bits are almost never applied to partridges²¹, and the Defra research suggests that pheasants in large enriched raised laying cages have no greater requirement for bitting than pheasants in floor pens.²²

The Game and Wildlife Conservation Trust (GWCT) has also conducted [research](#) into bits which concluded that in the absence of feather pecking, birds with bits perform just as well as those without them. The existing Statutory Code of Practice reflects this research, as does the GFA Game Farming Guide:

"The use of management devices or practices that do not allow birds to fully express their range of normal behaviours should not be considered as routine and keepers should work towards the ideal of management systems that do not require these devices. Such devices and practices include mutilations such as beak trimming, procedures to prevent or limit flight such as brailing (placing a band on a wing to prevent extension of the wing), trimming of non-sensitive flight feathers and the use of bits, spectacles and hoods to prevent feather pecking, egg eating or aggression... Any device that is designed to pierce the nasal septum is illegal."

The Countryside Alliance supports the GFA, GWCT and Defra Code of Practice in reducing unnecessary bitting. However, if feather pecking becomes an exceptional problem in a particular flock, then bitting still has a role to play in maintaining high standards of welfare.²³ All bitting procedures should be justified and reviewed in the flock's health and welfare plan.²⁴

Conclusion

The Countryside Alliance and the Game Farmers' Association believe:

- Policy towards animal welfare, including the welfare of gamebirds, should be based on principle and evidence.

²⁰ Defra, 2010. *Code of Practice for the Welfare of Gamebirds Reared for Sporting Purposes*

²¹ Game Farmers' Association. 2010. *Raised Laying Units for Gamebirds*

²² Defra, 2015. *Project Code AW1303*

²³ GWCT, 2015. *To Bit or Not To Bit?*

²⁴ Game Farmers' Association. 2010. *Raised Laying Units for Gamebirds*

- Raised laying units are a vital element of game rearing and as such are a vital part of game shooting, game consumption and wider conservation work.
- The evidence from the Defra research (2015) clearly demonstrates that there is no need for further restrictions on the use of laying units, including raised laying units, when they are used in accordance with the existing statutory Code of Practice and industry guidance.
- The evidence from Defra's own research (2015) suggests that restricting or banning the use of properly managed raised laying systems could very well compromise the welfare of breeding birds.
- Advice from the Gamebird Veterinary Sector suggests that if RLUs are replaced with alternative systems, a rise in the use of antibiotics is almost inevitable.
- Game Farming is already subject to a Code of Practice under the Animal Welfare Act, based on the best science and evidence, and if there is evidence of poor welfare this should be addressed via enforcement of the Code and existing animal welfare laws.