

# Wildlife and Countryside Act 1981 (as amended)

Licences to kill/take birds/mammals (non-piscivorous)

NATURAL  
ENGLAND

Note: This report may be disclosed in response to Freedom of Information requests.

## Technical Assessment of Application

### Summary of Application and Decision

<b>Case reference</b>	2016-25141-SPM-WLM	<b>Purpose</b>	Preventing damage to livestock
<b>Species</b> Common buzzard (Buteo buteo)			

### Brief Description of Application

This is an application from the gamekeeper [REDACTED] for a licence to permit common buzzards to be shot to protect pheasant poults. The applicants consider buzzard predation of game birds to be having a serious impact on the profitability/viability of the shoot. Non-lethal methods of preventing the problem have been tried and are considered to have been unsuccessful at solving the problem.

<b>Recommendation</b>  Recommend Licence	Action Permitted: To shoot birds to kill (to aid scaring)  Reason for refusal: N/A  Date for reconsideration: N/A
Adviser Name: [REDACTED]	Date of Report: 01/09/2016

### Application Details

#### 1. Applicant

Title	[REDACTED]	Forename/Initials	[REDACTED]	Surname	[REDACTED]
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#### 2. Site Details

Address [REDACTED]	Describe precise location Seven pheasant release pens: [REDACTED]
Grid Reference [REDACTED]	

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Ownership of Site

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## Technical Assessment

### 3. Assessment Details

Type of Assessment	Site Visit	Date of Assessment	31 August 2016
Risk Level	High	Sensitivity Level	3

Risk Assessment

Site visit carried out on 31 August 2016 by [redacted] (Wildlife Management Adviser [redacted] and [redacted] (Wildlife Management Adviser [redacted] to gain a better understanding of the problem and to examine measures already in place to try and reduce it. Potentially sensitive as this is a species that is not normally subject to lethal control for this purpose.

Persons interviewed (if other than applicant)

Name	Address (if not as 2 or on application)	Role	Telephone Number
[redacted]		Farm owners	[redacted]
[redacted]		Assistant to gamekeeper	Via applicant

### 4. Background Information

[redacted]

Evidence provided by way of shoot returns show a steady reduction in birds shot since the 2012 season which has corresponded with increasing numbers of buzzards on the farm. Providing shoot returns, direct observations from keeper, farm workers and shoot staff and photographic evidence of predation. The applicant estimates the buzzard population to be 16 plus.

There has been a Judicial Review in the High Court of the way Natural England handled a buzzard application [redacted] leading to new internal guidance in May 2016 – *Internal Guidance Note SD/IGN/2016/001 – Licensing lethal control of birds to prevent serious damage* (in this instance, to livestock). This application has been assessed in accordance with this new internal guidance.

### 5. Evaluation

The IGN identifies four licensing principles which need to be met before a licence can be issued. These are:

- Principle 1: All other reasonable non-lethal solutions have been tried and/or shown to be ineffective.

- Principle 2: There is a genuine problem/need.
- Principle 3: There are no satisfactory alternatives.
- Principle 4: The licensed action will be effective at resolving the problem and the action is proportionate to the problem. Wherever possible, humane methods of lethal control are used.

In addition, there is an implicit principle that Natural England should consider the implications for the conservation of the species.

**Principle 1: All other reasonable non-lethal solutions have been tried and/or shown to be ineffective.**

The applicant stated, in the application and during the site visit, that many preventative measures had been tried over the years. These included: Using scarecrows in the pens, flashing lights and radios. Hanging CDs, bags with owl eye print on, owl print balloons, tape and fishing wire have also been tried. Improving cover for the pheasants adjacent to the pens outside by sowing cover crops, supplementary feeding (to provide an alternative food supply for the buzzards),

During the site visit there were signs of scaring devices such as the flashing lights, tape, fishing wire, owl print bags and balloons within all pens visited. The applicant explained that none of them had worked for long as the birds soon learn there is no consequence to the scaring aids.

At least twice daily visits to the pens are made by the gamekeepers to tend to the poults and also aids disturb hunting buzzards by human presence. It is not possible to be at all the pens at the same time and it would not be practical to visit the pens more often. Shooting to scare has not been utilised as an option due to the proximity of public footpaths (the police were called to the farm when they were fox shooting on one occasion). There are also some residential properties nearby which could be disturbed if this is done regularly.

Diversionsary feeding was discussed and the applicant has employed this method. Carrion (from shooting rabbits and foxes on the farm) will on occasions be left on the farm. He believes that the buzzards prefer a fresh kill to carrion or previously killed poults.

Other factors that can affect buzzard predation rates include the timing of release into the pens, the age of the birds when they are released, the number of birds released and the stocking density (Parrott, D., *Impacts and management of common buzzards Buteo buteo at pheasant Phasianus colchicus release pens in the UK: a review.* Eur J Wildl Res (2015) <http://link.springer.com/article/10.1007/s10344-014-0893-1>). The number of birds released and stocking density are discussed under Principle 2. Predation of birds released in June and July is higher than birds released in August and September. This may just be because the birds are exposed to predators for a shorter time before they are shot. BASC advise waiting until birds are 7 to 8 weeks of age to reduce vulnerability to predators. At ██████████ this year the birds were released from mid-July. The birds are 8 to 9 weeks old when released which is the latest they can be kept as they start feather pecking if kept in their rearing pens for longer. So the age of release is in accordance with industry guidance.

Removal of perches is sometimes recommended as a way of reducing avian predation. However, the pens at ██████████ are within or adjacent to woodlands with an almost infinite number of perches. Tree canopy cover within the pens was good, however the applicant advised that the buzzards still found a way in to pen (even with trying to deter them with fishing wire in the gaps in cover) and if they did not perch in the trees they will also chase pheasants along the ground. The buzzards are reportedly very adaptable and will use bale stacks in the summer for a perch vantage point. The applicant also reported that he sees what he believes to be family groups of up to 5 buzzards hunting together at times, this can be both within the area of the pens and their immediate surroundings and also the cover crops which are relatively close to each pen that are planted as part of the additional protective cover regime across the farm.

The main activity undertaken to reduce predation is to provide good cover within the release pens. GWCT guidance (*Pheasant release pen construction* - [http://www.gwct.org.uk/media/208820/pheasant\\_release\\_pen\\_construction.pdf](http://www.gwct.org.uk/media/208820/pheasant_release_pen_construction.pdf)) indicates there should be roughly one-third each of open sunny areas, shrubby ground cover and roosting trees. During the site visit the applicant took the advisors to all seven pheasant release pens and the following is an assessment of each area (feed and water is provided in each pen. All of the pens had adequate fencing and gated access into the pens with electric wire running around the outside, conforming to GWCT guidance. The applicant classes all the pens as large with the exception of ██████████ which only hold low numbers of poults:

Due to the fact that the site visit was undertaken several weeks after the poults had been released into pens, the level and quality of ground cover seen during the visit had already been affected by the poults, so, in relation to assessing the pen quality pre-release of the poults we sought confirmation from the applicant that suitable ground

cover existed within the pens. We have also taken into account the ground and shrub cover in close proximity to each pen to gain an idea of the species that were present in that location.

██████████  
The pen is entirely within established broad-leaved woodland with a high but not fully enclosed canopy. There was patchy remaining ground cover in the form of nettle and alder but the bulk of this has now gone due to the presence of the poults. The woodland consisted of predominantly hawthorn, beech and willow. Ground cover outside the pen was a mixture of arable, grass and a maize and kale cover strip that extended around 400 yards away from the pen running alongside a hedgerow provided good alternative ground cover for the poults, many of which were seen moving around within the lower kale section. There appeared to be a high amount of cover in the surrounding woodland which is likely to provide good protection from avian predators. The amount of open sunny areas within the pen was hard to establish due to the height of the trees, the angle of the sun as it crossed over the pen and penetrated the canopy would probably provide numerous scattered sun spots within the pens interior. It was mentioned by the applicant that last year 154 poults were killed in less than a week by what appeared to be hunting family groups of buzzards on the grass field adjacent to the lower arm of the pen nearest the wood edge, where the poults were feeding in a line on crane flies in the field. According to the applicant, the problem wasn't as bad when cattle grazed the field.

At the time of the visit a recent buzzard kill was found within the pen, with the bird upside down and wings intact, a fairly recent kill. At least 5 other older carcasses and feathers were seen within the pen. A buzzard tail feather was also found in the pen. The applicant showed us a selection of spinning balls, suspended and secured tapes, loose flapping bags and secured flight line disruption twine that was placed in and around the pen. Since the weather has become warmer they have noticed a slight decrease in numbers predated, probably lost 20 birds at least that week, the applicant believes the buzzards may have had a bad breeding year. Tawny owls are occasionally seen in the area but are not considered to be a problem.

██████████  
This pen was located with an area of established woodland and consisted of broadleaved ~~woodland~~ species of predominantly alder, willow, oak and ash. Crucially there appeared to be a good amount of mid and high canopy cover for birds, both in the pen and surrounding woodland. There was an area of maize cover next to the pen into which the birds could find cover once released from the pen and Autumn Surprise cover crop seeded adjacent to this.

██████████  
This woodland is again mainly established broadleaved comprising beech, oak and hawthorn with the occasional birch. The tree canopy was high and sun light was penetrating to ground level across most of the pen. Additional cover within the pen in the form of corrugated iron shelters, both on legs and semi-circular sections were located in the pen and open areas had been created via both management of the trees within the pen, some of which had been left where they had been felled, and the clearance of wind-blown trees. ██████████ attended the site visit at this pen and advised that pens for partridges may be put up on the hill but they are not sure it will be viable. A maize cover crop had been planted approx 100 yards from the pen and it was to this that the poults were being drawn as they matured and started to explore their surroundings. On the way to the next pen we witnessed 8 buzzards on the ground in the field that connected this woodland to the next pen visited. The use of suspended plastic bags/sacks and secured flight line disruption twine were the main forms of non-lethal methods used within and around this pen.

██████████  
The pen is located within mature established broad-leaved woodland with a high canopy and numerous bright sunny patches could be seen throughout the pen. The trees were mainly beech, hawthorn, birch, oak and some holly—Cover here was considered to be very good and although the ground cover had been heavily depleted, mid-level cover was still present and was located throughout the pen. A fresh carcass was seen in the pen. Around 8 corrugated iron shelters were located within the pen to provide both dusting areas and shelter for poults. 3 buzzards were seen in the tree on the nearby hedge when we were exiting the pen. Open space within the pen consisted of numerous patches (with good sunlight) throughout the pen. Suspended plastic bags and flight line disruption tape were the non-lethal methods used in and around the pen. As the poults develop and explore the surrounding woodland they tend to be drawn to an adjacent small block of woodland with a maize cover crop alongside it.

██████████  
The pen sits just within established broad-leaved woodland setting with well-established trees including beech, willow, ash and hawthorn being present. The canopy is high and not fully enclosed although flight

space for raptors does exist immediately below the canopy. Within the pen itself additional shading and dusting shelters had be provided and the level of mid-level cover was good and spread fairly evenly throughout the pen, sun light penetration was present throughout the pen with numerous "spots" being seen, the back third of the pen in particular was well lit during the visit. Ground cover was very limited within the pen and the surrounding woodland also showed signs of reduced ground cover, possibly as a result of extensive mid-level shrub and bush presence. A maize cover crop has been planted approx 100 yards from the pen and it is to this that the poult are drawn once they mature and start to explore their surroundings.

This pen sits within a less well established location (although the surrounding woodland does follow the level of establishment of the majority of the woodland visited) with the canopy in most places only reaching about 20 feet in height, it reminded this advisor of an area that had been previously heavily coppiced and had then been left to its own devices for a considerable period of time. Due to the inherent problems of this sort of location- low fairly heavy canopy and extensive areas of mid-level shrub growth it did look as if the regeneration of the ground cover could have been limited due to the canopy cover. Having said that, the woodland immediately surrounding the pen (which as mentioned was well established) was fairly even mixed of ground and mid-level cover and it was here and the surrounding cover crop that the poult were seen in. The applicant stated that this pen appears to have been hit the hardest this year and seemed to think that it varied each year which pen was affected the most. 3 buzzards were witnessed over the brow of the hill in the hedge of the adjacent grass field. The applicant has installed extensive non-lethal methods in an attempt to reduce predation in this pen via the use of yellow caution tape, an owl eyes balloon and flashing lights were evident in the pen which [redacted] was responsible for with the applicant. The applicant has also made attempts to compensate for the lack of ground cover by placing corrugated iron sheet shelters and areas of collected brash cuttings throughout the pen. We visited [redacted] and he verified that the buzzards are a big issue for the shoot; he was on the site the other day and witnessed a buzzard taking a poult. They try to scare the buzzards away by chasing them in vehicles when they are seen in open areas.

This is a small pen nearest the farm yard which is new for this season, it is located within what appears to be a thinned section of woodland adjacent to the farm track and had a good mid-level cover and some areas of ground cover were still present, the surrounding woodland was in good condition and contained additional ground cover for the poult. Once they matured and started to explore their surrounding the poult are drawn to a maize cover crop on the other side of the track. It is an experimental pen, to see how it works out. There is beech, ash, rowan and birch present. The applicant commented that some attention may be required to the fencing, the lower turn out at ground level was not as much as he would have wanted and the top turn over could also do with being extended, the applicant will speak to the fencing contractor about it.

Game cover crops in these areas were diverse and included a range of cereals and broadleaved plants. Cutting to minimise straight runs was suggested as providing more escape from predators following the poult. Feeding hoppers were situated alongside the game crops or hedges rather than being placed in the centre section of open rides.

<i>Pen</i>	<i>No. of poult released in 2016</i>	<i>Average stocking level over past 5 years</i>
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

The above table shows the stocking levels in each of the pens for 2016 along with a 5 year average for comparison. There is some evidence that predation of pheasants may be higher where stocking rates are higher (Parrott, D. Op. cit. (2015)) although actual figures are not given to show what constitutes a high stocking rate. Contradictory evidence can be also be found (in Kenward, Hall, Walls and Hodder (2001) *Factors affecting predation by buzzards on released pheasants*. In Journal of Applied Ecology <http://onlinelibrary.wiley.com/doi/10.1046/j.1365-2664.2001.00636.x/full>). Kenward et al report that in large game

pens, the highest rate of predation was found where fewer birds were released and they suggest increasing release numbers to reduce predation. 2008 guidance from the GWCT recommend stocking rates of between 700 and 1000 poults per hectare of release pen. However, this appears to be mainly aimed at preserving botanical diversity which isn't relevant here. Given the lack of a recommended stocking rate for preventing buzzard predation we can look at typical stocking rates in the UK. There are apparently documented cases of 8000 poults per ha with a mean of 1800 poults per hectare (<http://www.gwct.org.uk/game/research/species/pheasant/releasing-for-shooting-in-lowland-habitats/>). The poults appeared to have ample space when observed during the site visit, with ground cover being present when the pheasants are initially introduced to the pens. Reduced levels of ground vegetation was very evident as the poults had destroyed this. The use of shelters, collected brush piles and the leaving of felled or wind-blown tree's added to the efforts made by the applicant to provide additional cover and protection of the poults. The applicant believed the buzzards would find a way of predating on the poults one way or another.

A final point from Parrott (2015) was that pens that extend out of woods into open areas tend to suffer higher predation. This was quoting some research from 1976 and no further details are given, however at [REDACTED] all of the pens are contained wholly within woodland with very few open areas so this is not an issue at this site.

**Principle 2: There is a genuine problem/need.**

The applicant was asked by Natural England to provide data to demonstrate the level of damage suffered by the shoot. The applicant advised that approximately the same numbers of birds are released each year, with [REDACTED]).

Year	Pheasants released	Pheasants shot	Percentage return
2011-12	[REDACTED]	[REDACTED]	35.4
2012-13	[REDACTED]	[REDACTED]	31.6
2013-14	[REDACTED]	[REDACTED]	26.1
2014-15	[REDACTED]	[REDACTED]	29.2
2015-16	[REDACTED]	[REDACTED]	27.2

The industry average for pheasants shot, based on the National Game bag Census, is 40% although this may be an over estimate as it includes wild birds and birds released on other estates (Game and Wildlife Conservation Trust <http://www.gwct.org.uk/game/research/species/pheasant/releasing-for-shooting-in-lowland-habitats/>). The return rate for pheasants at [REDACTED] has been below 40% in the past five seasons which is significantly below this national average.

Of course there are many other causes of game bird mortality including other predators, disease and road casualties plus some birds may stray from where they were released on to neighbouring properties and some presumably avoid getting shot and become feral. It is worth examining the significance of each of these factors as it helps inform the contribution of buzzard predation to the high levels of game birds lost.

*Predator control*

The main predator is the fox. Fox control is undertaken by the landowners and when the combining is done the farm are able to clear the ground of foxes to reduce predation of gamebirds. Fox control is done mainly by shooting at night, using thermal imaging and night vision sights on high-powered rifle. This is done on a very regular basis. Snares are also used, the applicant had one with him on the visit which he showed. The shoot also tends to keep birds in the pens for as long as possible so they are protected from foxes for a maximum amount of time. There are other raptors in the area such as sparrowhawks and tawny owls but they do not pose a problem. Infrequently red kites are witnessed but are not considered to be an issue. A neighbouring landowner has a problem with goshawks, but [REDACTED] has not been affected to date.

*Disease*

Pen mortality due to disease is considered relatively low. There was no evidence that this was part of a significant problem and all other birds seen appeared alert, active and healthy. The stocking rates appeared to be fairly low and the birds were roaming outside the pens in field boundaries and cover crops so there did not appear to be an issue with overcrowding anywhere.

*Strays*

Due to the area of the farm there are amounts of 'dead ground' around the outsides of the main release area and some open areas being the nature of arable cropped fields. Losses from straying are hard to quantify but the applicant did not believe this to be a big problem, he mentioned that they may receive birds from adjacent landowners which is inevitable

#### *Road kill*

There are no main roads close to the release sites and access to the release sites is gated so no vehicles can get close to where the birds are. It is therefore considered that road kill is not a significant problem.

The applicant states that kills are found on a regular basis and commented that in wet weather buzzards apparently switch to foraging for worms which might temporarily reduce gamebird predation, but the impact that this would have on reducing predation is unknown. The applicant explained that he can provide details of predation via the number of dead birds found, but there will always be an unknown quantity that are never recovered either because they are removed by the predating birds and also predation takes place within dense cover and away from the release pens which cannot be accurately quantified.

Research suggests that typical gamebird losses to buzzards are 1% to 2% with 5% being exceptional (one in thirty shoots may suffer this level of loss with an even smaller number suffering losses of up to 10%) (Parrott, D. Op. Cit. (2015) mentioned in the abstract). The applicants are therefore suggesting that the losses they are suffering are not just above the norm but exceptional. It is likely that the birds found in the pens will have been killed by buzzards – the pens are proofed against mammalian predators and buzzards are the most numerous and most likely avian predators. During the site visit only one fresh kill was observed but a large number of poult carcasses and feathers could be seen. Losses of gamebirds tend to be higher where more than 500 birds are released into a pen.

The presence of buzzard nests does not relate to levels of buzzard predation and the presence of buzzard nests alone is not enough to demonstrate there is a genuine problem (Kenward et al, Op Cit. 2001). However, it is useful to have some idea of the number of buzzards on the farm, apart from anything it will allow us to better understand the impact of removing some birds from the population. The applicant stated in his application that he thought there are approximately 16 individuals in the area. During the site visit 8 buzzards were seen in one field and the bulk of the pens visited had between 1-3 individuals close to them so it is possible that the applicants figure of 16 is well below the actual numbers present on the day, this assessor would offer a figure of at least 25 buzzards present on the farm on the day of the site visit. Buzzards are territorial and the territories are determined by the availability of nest sites and not the availability of food. Buzzards are apparently willing to commute to favourable hunting grounds outside of their territories. Territory size seem to be variable and figures between 0.22 pairs per km<sup>2</sup> and 1.8 pairs per km<sup>2</sup> have been quoted (in <http://www.cheshireandwirralbirdatlas.org/species/buzzard-breeding.htm>) depending on the quality of the habitat. This would equate to between 1 and 7 pairs on a farm the size of the application but most of the studies mentioned in this report are old and, of course, the buzzard population has grown since. As the population has grown buzzards have tended to nest closer together, maintaining smaller territories. 2001 figures for north Somerset (quoted in the above paper), probably the closest of the study sites to ██████ geographically and in habitat, showed 1.1 pairs per km<sup>2</sup> which would equate to 4.5 pairs on an estate the size of ██████. So although there is some doubt over how the buzzard population has been calculated, the figure is not necessarily unrealistic. Given an average of 2 fledged young per pen there could be a number of juveniles added to the population from July onwards, just as the gamebirds are due to be released, providing a ready food source.

The farm usually stocks the pens in mid-July. Stocking levels are fairly constant from year to year but slight variations occur. There are not thought to be many residual birds breeding on the farm from previous seasons. Poults are an initial cost of ██████ each, but with cost of feed, manpower etc taken into account the keeper estimates that the birds cost would be nearer to ██████ each.

Using the figures supplied by the applicant of the shoot returns for 2015/16 and using 40% as the desired return rate, the returns reported show a loss in the region of ██████ at the mid-level rate of ██████ per poult.

#### **Principle 3: There are no satisfactory alternatives.**

Possible alternatives to lethal control include destroying nests and eggs, to try and discourage breeding buzzards from building their nests close to the rearing pens, translocating buzzards and taking adult birds into captivity.

In 2013 Natural England issued a licence to destroy nests and eggs ██████ but the licensee did not consider this a success as the birds built new nests nearby. In any case, it is the wrong time of year to try this. This option could help in future if the aim of a licence were to reduce the buzzard population but at present the aim is to remove problem birds. This is therefore not considered a satisfactory alternative in this instance.

Taking adult birds into captivity is, in conservation terms, no different to shooting them although it may be more acceptable to some people as it does not involve lethal action. The obvious drawback is that there is a limit to the number of falconers who will want wild caught buzzards. However, it may be a solution for a small number of birds. A Wildlife Adviser contacted the British Falconers Club to see if anyone could be found who would be keen to take wild captured buzzards for a previous application. One falconer was initially interested in taking two to three but was going to be on holiday for three weeks at the crucial time. Unfortunately, this option could not be pursued on that occasion and in this case there is a time constraint in that the applicants are looking for a licence urgently as now is the time most damage is done to the birds (whilst the poults are younger and smaller)

Capturing birds and releasing them elsewhere would be problematic. Buzzards are territorial and as a common species there are unlikely to be free territories in which to release them.

Shooting a few buzzards to enhance scaring was considered and ruled out due to the likelihood of causing stress to the pheasant poults as this would require the use of auditory scarers in the release pens.

Shooting buzzards to reduce the buzzard population was considered and ruled out as it is unlikely to be successful as the dead buzzards are likely to be quickly replaced by 'surplus' buzzards from the surrounding area.

Targeting problem buzzards by only shooting individuals seen feeding on gamebird carcasses would appear to be the best method, as this is highly targeted and based upon visual and tangible evidence of predation.

A range of other non-lethal measures have been discussed above (under Principle 1). As previously discussed, it may be possible to make the swipes in the cover crops curved/meander which could make it harder for buzzards to hunt.

As previously mentioned, smaller releases of less than 500 birds suffer less buzzard predation. Pheasants are currently released into seven pens with up to [REDACTED] poults released in each. It would not be possible to reduce pen sizes so that only 500 or less pheasants were released as this would involve going from seven to approximately [REDACTED] pens

**Principle 4: The licensed action will be effective at resolving the problem and the action is proportionate to the problem. Wherever possible, humane methods of lethal control are used.**

The applicant has asked for a licence to shoot four buzzards. The proposal is to target particular problem buzzards in and around his pheasant release pens.

Evidence for whether there are problem buzzards that target gamebirds more than other buzzards appears to be limited although there does appear to be evidence that some buzzards frequent pheasant pens more than others. The gamekeeper mentioned recognising family groups of buzzards. The applicant certainly believes there are buzzards that target game birds more than others and feels that their removal could provide respite for the gamebirds during a vulnerable period, the theory being it would take time for other buzzards to replace them and/or adapt their behaviour to also start targeting gamebirds ahead of other prey. In the USA licences are apparently issued under similar circumstances and are believed to potentially contribute to solving conflicts (Parrott, 2015). In the UK the method of taking two buzzards into captivity where they were predating on free range hens appears to have worked in the recent past. The approach of removing specific problem buzzards through lethal means or capture appears to be relatively novel in the UK as most similar licences are issued with the aim of enhancing scaring. Enhancing scaring would not be appropriate in this case due to the likely stress that would be caused to the gamebirds.

Assuming there are problem buzzards that can be targeted by only shooting individuals that are feeding on a kill, there appears to be a reasonable likelihood of successfully reducing predation. The vulnerable period for the released birds is considered to be from when pheasant release begins, until the end of September, so licenced activity should be restricted to this period.

**Implications for the conservation of the species.**

See Section 7 below.

## 6. Consultations

Is the proposed site on or near a designated site (NNR, SSSI, SPA, SAC etc)? No		
Where the proposal might impact on a designated site, have you consulted Natural England colleagues? N/A		
For SPAs and SACs, is an Appropriate Assessment necessary? N/A		
Reason for Consultation and Summary of Response		
The team manager and adviser responsible for [REDACTED] have been made aware of the application as part of the land area for one of the pens extends into the neighbouring county of [REDACTED]		
Colleague/body Consulted	Date of Consultation	Date Response Received
N/A	N/A	N/A

## 7. Consideration of Conservation Factors

BTO figures show 67,000 pairs of common buzzards in the UK in the summer (2009 figures) with additional birds wintering here. It is currently the UK's most common raptor. There are 510-700,000 pairs in Europe of which 11% breed in Britain. The European population has shown a moderate increase over the past 25 to 30 years although the BTO/JNCC Breeding Birds of the Wider Countryside data reports a 132% increase in the UK between 1993 and 2008 with a spread into central and eastern areas where they had previously been scarce. The Common Bird Census for 1998-2008 reports an 85% increase in population. There does not appear to be any recent data on the status of the species in Wiltshire

Buzzards are not currently of conservation concern and are therefore green listed.

Lethal control of a small number of buzzards is unlikely to impact on the buzzard population. Approximately 75% of juvenile buzzards fail to survive to adulthood and the most likely cause of death is starvation. It is likely that any shot birds will be replaced by juveniles that might otherwise have starved. Licences are already given to shoot buzzards to preserve air safety and buzzards are illegally killed. However, consideration may need to be given into the cumulative impacts of several similar licence applications in the same area should other applications be received in the future.

## 8. Disease Considerations

Is the proposed action likely to present a disease risk to wildlife, domestic animals or people? No <i>If "yes", a Disease Risk Assessment (DRA) is required for this case. Consult the SOP for guidance.</i>
Consideration of Disease Risk:
Lethal control of buzzards should not present any disease risk.

## 9. Licensing Criteria

Is there clear evidence that the species in question is causing or is likely to cause serious damage?	Yes
Are there other evident causes of the serious damage?	No
Where appropriate	

<ul style="list-style-type: none"> <li>• have non-lethal methods been used?</li> <li>• have they been found to be ineffective or impractical and not just difficult to implement?</li> </ul>	<p>Yes Yes</p>
Is there any other satisfactory solution?	No
Will the proposed action contribute to preventing the damage?	Yes
For birds on Sch 2, Part 1 of the Wildlife and Countryside Act 1981 (the quarry list) only, are there good reasons why action could not have been taken in the open season?	N/A

## Conclusion

### 10. Conclusions and Justification for Recommendation

The application has been assessed in accordance with Internal Guidance Note SD/2016/001 which, as previously mentioned, gives four tests that should be met before a licence is issued:

**Principle 1: All other reasonable non-lethal solutions have been tried and/or shown to be ineffective.**

The main current non-lethal solution tried is to provide good cover in the release pens. The proportion of open areas to shrubs and trees within the pens is not necessarily in line with Game and Wildlife Conservation Trust (GWCT) guidance but the approach taken appears to be thought out with canopy cover aimed at preventing entry of the birds to the pens – they still find gaps to enter the pens though and if there were more open areas this could still be an issue. Ground cover has been considered but easily is destroyed by the poults and although there are logs and lower level areas of vegetation such as alder and holly, the buzzards can still attack the poults. , cover crops are sown outside the pens. The crucial thing is that the poults have good access to cover when they are released into the pens. Those that are predated are surprised when loafing in the open spaces, which they require for their welfare. Visual scaring techniques have been used over time, but the applicant was unable to find a method which worked for more than a few days. He reported seeing buzzards entering pens by flying through flight line disruption twine that had been installed around pens. Diversionary feeding is used although the applicant is sceptical about its effectiveness due to his observation that the buzzards seem to prefer a fresh kill to carrion. Birds are released as late as possible and at an age recommended by the British Association of Shooting and Conservation (BASC). The stocking densities within the pens appear to be comfortably below the national mean and the majority of birds appeared healthy and the pens did not appear crowded. A reasonable level of non-lethal solutions have been tried over time, and have either not worked or have only been partially successful. The range of activities that have been tried are at least as good as for most similar licence applications and discussion with the applicant indicates that he seems to have a thoughtful approach to the problem, looking at novel ways of managing the habitat within the pens.

**Principle 2: There is a genuine problem/need.**

The applicants have provided data proving that bag returns for pheasants are well below the national average (less than 30% in the past two years, compared to the national average of 40%). While foxes are acknowledged as the main predator, they mostly do their damage once the gamebirds have been released and they cannot be responsible for losses in the pens from which they are excluded. In any case, fox control appears to be intensive and there is little more that can be done in that respect. Strays, road kill and disease also do not appear to contribute significantly to high loss rates. The applicant has estimated that approximately 17% of pheasant poults are killed by buzzards. This is based on numbers of observed carcasses. We only have the applicant's word for the number of carcasses found and record keeping could be improved (e.g. keeping a daily diary record of carcasses found) to make the evidence more robust. Signs of kills were seen within the pens during the visit and the numbers of observed carcasses seemed plausible given the high number of poults in the pens and a potentially high buzzard population. There may be other factors that partly contribute to the high losses, such as the large numbers of birds released, but on the balance of probabilities it seems that buzzards are causing significant damage to the shoot with major cost implications for the enterprise. The applicant reported that they used to see grey partridge but there are none left which they believe to be due to the buzzards. It is also thought that they are having an effect on the stone curlew, for which the landowners have sown plots for.

**Principle 3: There are no satisfactory alternatives.**

A range of alternatives have been tried which are considered to have failed or have only been partially successful

(as described above).

Other options considered for this application include destroying eggs and nests (not an option at this time of the year), translocation (buzzards are territorial and as a common bird it is likely to be impossible to find a vacant territory where the landowner is happy to receive buzzards). Other options include capturing birds and taking them into captivity for use by falconers. The option to take some birds into captivity but time is of the essence.

Shooting a few buzzards to enhance scaring was considered and ruled out due to the likelihood of causing stress to the pheasant poults as this would require the use of auditory scarers in the release pens.

Shooting buzzards to reduce the buzzard population was considered and ruled out as it is unlikely to be successful as the dead buzzards are likely to be quickly replaced by 'surplus' buzzards from the surrounding area.

Targeting problem buzzards by only shooting individuals seen feeding on gamebird carcasses would appear to be the best method, as this is highly targeted and based upon visual and tangible evidence of predation.

**Principle 4: The licensed action will be effective at resolving the problem and the action is proportionate to the problem. Wherever possible, humane methods of lethal control are used.**

Evidence on the likely success of the proposed method of removing problem buzzards is thin but then it is a relatively novel method as most similar licences (e.g. for piscivorous birds) are issued to kill birds to enhance scaring. What is uncertain is whether there are individual problem buzzards that target gamebirds more than is usual, in which case killing them (when they are seen feeding upon birds) would be effective, or would the shot birds quickly be replaced by other birds that are equally likely to predate on gamebirds? The limited evidence there is suggests there is a reasonable chance the method will work and the relative lack of evidence should not be a factor in deciding against it given the lack of research carried out. This licence should therefore be used to try to gather evidence which might help inform any future applications (from this farm and elsewhere).

**Conservation of the species**

Buzzards are a common species and shooting a small number is unlikely to have any impact on the population. Buzzards that are removed are likely to be quickly replaced by 'surplus' buzzards in the surrounding areas.

**Proposed options**

It is recommended that a licence be issued, with immediate effect, to permit up to four buzzards to be shot with a suitable firearm when predating on pheasants within and around the pheasant release pens and associated cover this will allow the applicant to target specific problem birds. It has not been recommended for a higher number of buzzards to be killed as we are already a considerable way into the vulnerable period for the gamebirds to suffer avian predation. Due to the novel method employed and the high sensitivity of controlling raptors to protect gamebirds it is advised that a compliance check before the licence expires at the end of September is undertaken. This will also afford an opportunity to gauge the applicant's view of the success, or otherwise, of the methods employed.

It is suggested that the applicant be required to improve record keeping e.g. keeping a daily diary of gamebird carcasses found in the release pens, which might show the effectiveness of removing problem birds (i.e. if there is an immediate drop in predation in a particular pen when a buzzard is shot there). Photographs of crop content could be taken as well.

## 11. Attachments

None