From: [redacted]
To: [redacted]
cc: [redacted]
Subject: RE: URGENT: Application for a licence to shoot buzzards predating on free-range chickens - IN CONFIDENCE
Date: 02 May 2012 11:24:00

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

From: [redacted] (ERG-BIO)
Sent: 02 May 2012 10:57
To: [redacted] (NE)
Cc: [redacted] (ERG-BIO); [redacted] (NE); [redacted] (NE); [redacted] (ERG-WAC)
Subject: RE: URGENT: Application for a licence to shoot buzzards predating on free-range chickens - IN CONFIDENCE

My thoughts and apologies for the note form, but time is limited. We will need to discuss stakeholder handling before the licence is granted if you are pressing ahead:

- I think the technical assessment is incorrectly dated – Date of report should be 27/02/2012 not 2011?

- I don't understand the calculation on pg 3 of the tech asst. If you replace hens, then you also replace the egg laying process and feed the new hens? Surely the loss is therefore just the cost of replacing the hens, because they are choosing to do this

at one point in the year is their choice- could there be a regular in-flow of new birds to manage this financial loss a bit more?

- On the licence review doc at para 8 I'm disappointed to see a statement of this being a "novel" application , for which there is "no specific policy guidance". There is policy guidance which applies across species and it's unrealistic to expect there to be tailored guidance for every circumstance. You need to work within the policy framework which exists.

- A lot of "think", "feel", "are sure", "suspect" but I'm getting anecdotes not facts? This is important because for example in "Case A" you're insisting that records are kept and facts established- are you confident the approach is consistent here?

- There is a note that predation was suspected into have cause lower egg production because of stress in October but losses were later found to be due to a feed problems, have you bottomed out the financial effects of this episode ?

- Not clear that the elimination of two buzzards will resolve the problem, so is it a suitable solution?

- It is not clear which buzzards are responsible, so how will the correct "rogues" be targeted?

Let's discuss?

[redacted]

[redacted]

[redacted]

Defra

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Tel: [redacted]

Mob: [redacted]

From: [redacted] (ERG-WAC)
To: [redacted] (NE);
Subject: RE: URGENT: Application for a licence to shoot buzzards predating on free-range chickens - IN CONFIDENCE
Date: 30 April 2012 10:17:16

[redacted]

I would be grateful if you could resolve a couple of queries that I have:

1. I noticed in Table 1 of [redacted] report that egg production was very low for 600 birds- between 280 and 300! I assumed that the low egg production was due to predation of the birds through the period July 2011 to February 2012. However, I note that under Table 3 that egg production dropped suddenly in mid-October and presumably significantly as eggs had to be bought for re-sale. The reason was put down to stress from the presence of the buzzards and possibly creching of chicken sheds. These reasons are reiterated in the accompanying review document, but it concludes by stating that "The Applicant now considers this to have been most likely the result of a feed problem." In the light of this comment, I was wondering just how significant the loss of eggs was in October and subsequently compared to the losses caused by the predation of hens over the whole July to February period. If it was not negligible and the cause was not buzzards, this feed problem may have a bearing on the conclusions to be drawn about losses to buzzards. I assume that this comparison has already been made but I felt I needed to ask.

2. My second point is rather more speculative. Having seen the way corvids will persistently mob buzzards, I wondered whether anyone had ever tried encouraging them (eg by feeding grain or other vegetable matter) so that they would act almost as "guard" birds that would see off buzzards. Having looked at the Fera report, the literature suggests that the presence of corvids can actually attract other predators such as larger birds of prey which seems counter-intuitive in some respects. Perhaps a determined buzzard cannot be seen off by corvids.

I would be interested in your views on these points.

Best wishes.

[redacted]

From: [redacted] (NE)
Sent: 29 April 2012 20:57
To: [redacted] (ERG-BIO)

Cc: [redacted] (ERG-BIO); [redacted] (NE); [redacted] (NE); [redacted] (ERG-WAC)
Subject: URGENT: Application for a licence to shoot buzzards predating on free-range chickens - IN CONFIDENCE
Importance: High

Dear [redacted]

As discussed on Friday, [redacted] have approved, in principle, the issue of a licence to control buzzards to prevent serious damage to a free-range poultry unit. Before making a final decision we wanted to give the Department the opportunity to comment on the case.

As I explained, Natural England will be advising key stakeholders (specifically: the RSPB, the National Gamekeepers Organisation and other parties involved in the Working Group) of our intention to issue a licence due to their interest in this topic. As agreed, we will not do this until you have provided your feedback on the case.

I would be grateful for early feedback, as we are keen to progress the case swiftly.

Enclosed

1) Summary of case

2) Adviser's report

<< File: wlm-11-1801 - Buzzard - [redacted] - assessment - ver 4a - 27-02-12 redacted.pdf >> << File: wlm-11-1801 - Buzzard and poultry v3.doc >>

Regards

[redacted]

29 April 2012

[redacted]

Wildlife Management and Licensing

Natural England

Address:

[redacted]

[redacted]

[redacted]

Tel: [redacted] [redacted]

www.naturalengland.org.uk

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

Wildlife and Countryside Act 1981 (as amended)

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

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

NATURAL ENGLAND

Technical Assessment of Application

Summary of Application and Decision

Case reference	WLM/2011/1801	**Purpose**	Preventing damage to livestock

Species Buzzard

Brief Description of Application

Application to shoot individual Buzzards responsible for predating free-range chickens. This amended assessment report (ver.4) follows a deferral period (to monitor the situation and gathering additional evidence) and further discussion with the applicant on 02 Dec and 27 Feb. It also follows comments by [redacted] received since 09 Dec 2011 and [redacted] (Principle Adviser), since 27 Feb 2012. This version (ver.4) replaces my three previous assessment reports, dated 23 Oct, 02 & 15 Dec 2011.

Recommendation	Action Permitted: To kill birds (other than to aid scaring) Reason for refusal: N/A Date for reconsideration: N/A
Recommend Licence	

Adviser Name: [redacted] Date of Report: 27/02/2012

Application Details

1. Applicant

Title	[redacted]	Forename/ Initials	[redacted]	Surname	[redacted]

2. Site Details

Address

[redacted]	Describe precise location former field [redacted]
Grid Reference [redacted]	

Ownership of Site

As 1.

Technical Assessment

3. Assessment Details

Type of Assessment	Site Visit	Date of Assessment	19/10/2011
Risk Level	Low	Sensitivity Level	3

Risk Assessment

Bird of prey licensing is a sensitive issue and this application required a site visit. Case also assessed via telephone on 02 Dec 2011 and 27 Feb 2012.

Persons Interviewed (if other than applicant)

Name	Address (if not as 2 or on application)	Role	Telephone Number
[redacted]	As 2.	Business owners	[redacted]

4. Background Information

Four years ago, [redacted] started a small scale free range egg production business at [redacted], a smallholding in an exposed, rural area located a little east of [redacted] [redacted] They started with 40 chickens kept within a paddock and have since periodically purchased batches of hundreds to bring the total currently held at c.600 laying hens. Some of these chickens are still kept within a small paddock, situated opposite [redacted]'s dwelling, [redacted], but the majority are housed in small timber chicken sheds, placed in a [redacted] acre triangular-shaped pasture field, located 200 metres up a farm track. Chickens are sold on or given away after about two years of residence.

[redacted] have invested their savings into this small enterprise, profit margins are small and having spent heavily on a Fox-proof fence recently, they are experiencing lean times. During severely cold spells of weather in Nov/ Dec 2010 and again in Jan 2011, 8 and 4 chickens respectively were predated by Buzzards, an acceptable and not unexpected rate of loss given weather conditions at the time. However, from Jul to Oct 2011, [redacted] [redacted] lost >40 chickens to Buzzard predation. Since repeated attempts failed to scare Buzzards away, a licence application was submitted to shoot the individual Buzzards responsible for chicken predation.

On 02 Dec 2011, [redacted] reported loosing at least another 10 chickens since I spoke to him 6 weeks earlier, and by 27 Feb 2012, had lost another 12, mostly during the cold spell in Feb. This is despite introducing new and improving existing non-lethal anti-predation measures. The applicants therefore still wish to pursue a licence and this report is amended (since my 19 Oct 2011 site visit) with new evidence to support their request.

5. Evaluation

Extent of damage

Losses of hens to predation

On the application form, [redacted] describes the predation of free range hens at the rate of 1 or 2 per day. They believe a number of local Buzzards may have been responsible for taking a few chickens last winter, but [redacted] [redacted] suspect the spate of predation since Jul 2011 is mostly the work of just one or two individual Buzzards.

During my site visit on 19 Oct 2011, I asked further questions about predation. It appears that one or more individual Buzzards predate one chicken per day, for periods of 2 or 3 days, then cease for a week or so. If predation accounted for >40 chickens during the past 3½ months (~110 days), this equates to losing one every 2.75 days. They lost a few more (estimate ~ 5) during the intervening 6-week period (to 02 Dec), so overall the loss of c. 45 hens in c.153 days is a predation rate of one hen every 3.4 days for 5 months.

Buzzards do not predate chickens all-year round and the farm suffered no, or very few losses throughout spring 2011 and in Jan 2012 - an exceptionally mild winter month. The 2011 calendar year loss total was 57 (avg. a predation rate of one hen every 6.4 days) and to date (27 Feb) has 12 lost in 2012 (a predation rate of one hen every 4.8 days).

Hen predation rates can therefore be expressed in different ways, ranging from one per 6.4 days (overall average per annum including non-predation periods) up to one per 3.4 days (during, sometimes long, periods of predation).

The farm expects natural mortality to account for only one hen every few weeks, and lost 26 in 2011. Therefore if Buzzard predation remains at similar rates (50 lost in 5 months or c.60 in 12 months), this multiplies re-stocking costs 2.3 to 4.6-times (replace 60 to 120 predated hen in addition to 26 hens).

Free range Silverlink organic laying hens cost [redacted] each (the cheapest hens on market are ~[redacted]). Kept for 2 years, 75-80% of these chickens are expected to lay an egg every day, reducing to c.50% eggs per day in the coldest of winter weather. [redacted] estimated her chickens produce 280 to 300 eggs per year each. Eggs are sold [redacted] per dozen (median = [redacted]). Eggs are sold directly to B&Bs and markets, so no 'middleman' costs, just the main direct costs of packaging and distribution.

The following tables estimate annual profit (without Buzzard predation) and the financial cost suffered so far from losing **52** laying hens to Buzzard predation from **Jul 2011 to Feb 2012** (244 days).

Table 1. annual net profit

Egg production gross profit					
No of laying hens	No eggs produced per annum	Eggs sold per dozen	Income from hens sold biennially	calculation	**Sub-total**
600 hens	290 (280 - 300) eggs	[redacted]	[redacted] (guess; some sold, some given)	(600 x 290 x [redacted] + (600/2 x [redacted]	[redacted]

Production and overhead costs					
Feed cost per month	Transport and other business overheads per month	Price per laying hen	Restocking costs (replaced biennially)	calculation	**Sub-total**
[redacted]	[redacted]	[redacted]	(600 hens/ 2 yrs) x [redacted]	([redacted] x 12) + [redacted]	[redacted]

Annual net profit			
Gross egg profit	Annual overhead costs	calculation	**TOTAL**
[redacted]	[redacted]	[redacted]	[redacted]

Table 2. financial losses to Buzzard predation (Jul - Feb ~ 244 days)

Estimate of replacing laying hens			
Price of laying hen	No hens lost	Calculation	**Sub-total**
[redacted]	52	[redacted] x 52	[redacted]

Estimate of lost egg production				
Average price of an egg	Average egg production per day	Daily rate of hen loss to predation	calculation	**Sub-total**
([redacted] / 12 = [redacted]	(290/ 365) = 0.7945 eggs	1 hen/ 4.115 days = 0.243 hens	cumulative of y = [redacted] x for 244 days	[redacted]

Savings from lost hens			
Feed cost per hen per day	Transport and other business overheads	calculation	**Sub-total**
[redacted] / (365/12) days) / 600 hens = [redacted]	Guess no additional saving (they have to buy in extra eggs)	Cumulative of y = [redacted] for 244 days	[redacted]

Actual financial loss estimate				
Cost of replacing hens	Cost of replacing eggs	Savings from not feeding lost hens	calculation	**TOTAL**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

In Dec 2011, the introduction of enhanced scaring measures (since Oct) appeared to have reduced the rate of predation, and particularly mild weather through Jan saw almost a complete cessation of predation, but the

ineffectiveness of scaring was offset by cold conditions in Feb 2012, when most of the 12 lost this calendar year were taken, at a rate of one every other day.

[redacted] left his previous job to concentrate on their free-range chicken farm. With an estimated annual profit estimate of only [redacted] to support them both and with no other obvious source of income, this business could be described as running on a shoestring.

A seemingly obvious solution to reducing losses of egg production is to purchase new laying hens, not eggs from other businesses. However, laying hens cannot be immediately replaced, in a sense like buying them off a shelf. They need to be ordered, poults then need be over 16 weeks old, screened, vaccinated and introduced to the flock as the same age class. Different aged chickens need separate salmonella testing, so the need to perform just one £15 test one the whole flock makes economic sense. [redacted] order their poults from the same place and **do not expect to replace hens lost since Jul 2011 until mid-Mar 2012**. Therefore, the business is expected to continue losing money to Buzzard predation until hens can be replaced. A new shed and 200 hens will arrive in mid-Mar. Part of this total is to replace lost hens, the remainder are an attempt to slightly expand the business.

Expressing damage and consideration for relative significance can be expressed as financial loss and as percentage losses, both as losses suffered to date and as predicated losses if the problem is allowed to continue. The following table summarises damage to the business in a range of ways.

Table 3. Financial and percentage losses to Buzzard predation during 8 months (Jul 2011 to Feb 2012)

Financial and percentage losses to-date (Jul 2011 to Feb 2012)			
Annual profit (£) (Table 1)	**Financial loss** (£) (Table 2)	Financial loss as proportion of annual profit calculation	**% loss**
[redacted]	[redacted]	[redacted]	7.25 %
Numbers and percentage losses of laying hens to-date (Jul 2011 to Feb 2012)			
No hens on farm	No lost to date (Table 2)	Proportion of hens predated to date calculation	**% loss**
600	52	52/ 600	8.67 %

Egg production dropped suddenly in mid-Oct and the business has had to buy in additional eggs for re-sale to support their own diminished production. Consequently, the business ran at a loss for a while. [redacted] believe stress is the main cause of this additional loss of egg production. They have no evidence to support the view, but believe stress is induced by the presence of Buzzards. I agree this could be the source, but other factors could also influence egg production, including crèching the chicken sheds (which was an attempt to reduce predation risk). The sheds will be moved again in Mar 2012. The predation losses are minimum figures, [redacted] said she does not always remember to make a note.

Collectively taking into account the estimates of direct and indirect costs and marginal profits, losses experienced by this business to Buzzard predation are just within the definition of what I would regard as significant damage.

Other potential causes of losses

Other factors that have the potential to influence hen numbers include predators (other than Buzzard), escapees, disease and husbandry practices/ welfare.

Predators: The farm used to lose a few hens to Fox predation and eggs to crow predation. Losses to these predators are now negligible since the introduction of preventative measure (see below). A single sighting of a Fox in the field did not manage to predate any hens. It managed to scale the fence, panicked at being chased off, but needed a few attempts to escape.

Escapees: The hens are enclosed inside part of an open field by non-electrified fencing, then a Fox-proof fence and then a hedgebank. No reported losses of escapees.

Disease: Salmonella testing is always 'good', as [redacted] described it, meaning negative, and no reported significant losses to disease. in fact, [redacted] are so fond of their hens, the sick or injured are tended to, rehabilitated and returned to the flock. Losses to natural mortality are relatively low (26/ 600) ~ 4.3 %, a good pre-industrialisation rate[1].

[1] http://hamandeggonomics.blogspot.com/2009/09/understanding-mortality-rates-of-laying.html

Husbandry practices/ welfare: Poultry farms are inspected. Defra apparently has no welfare concerns. I had the

impression that [redacted] were particularly considerate to their hens and outside foraging conditions appeared to be good. One chicken shed I peered into was covered in droppings and could do with a clean; otherwise no concerns.

Buzzard numbers and activity

Buzzard presence: Buzzards are resident breeders in small numbers, but do not nest on the farm. Up to nine Buzzards reportedly seen at a time from the farm, presumably circling around on thermals. Only one Buzzard has been observed at a time within the hen field, but two individuals are suspected involved in chicken predation.

Buzzard behaviour: [redacted] has identified particular fence-posts around the field and telegraph poles within the field that are seemingly favoured by these particular individual birds, and has noticed patterns in their habits and directions of flight.

Occasionally a Buzzard is flushed off a recently killed and partly plucked chicken out in the field away from the sheds. Sick hens that die of (other) natural causes are invariably found inside or adjacent the sheds. It is therefore believed that Buzzards actually kill chickens, rather than just scavenge carcases. Last winter, chicken carcases were entirely stripped to the bone, but since then, only the neck was stripped and sometimes the belly ripped out to consume developing eggs. The injuries sustained by the chickens and locations of the kill suggest to me Buzzard predation, rather than any other form of predation. Having asked [redacted] a few of times about this, they are convinced that virtually all hen predation is now by Buzzards, and not by other predators.

When hens had full use of the field to roam around, those nearest the fence were taken. Sick hens remain in and around the sheds, so the assumption is that predated hens were healthy and productive.

Preventative measures

Human presence: [redacted] live on site, spending most of their time there, spending only a few hours away e.g. at market. One of them visits the chicken field three times a day and during Nov/ Dec 2011, [redacted] made more frequent visits throughout the day. Other people also visit to field and spend time nearby every day, checking the sheep and horses. Human presence scaring is therefore frequent to very frequent. [redacted] explained that the Buzzard now recognise the sound of [redacted] and quickly disperse, but simply wait in a neighbouring field then returned soon after during the worst periods of predation.

Occasionally, [redacted] has spent longer periods waiting for the Buzzard with his shotgun and has shot-to-scare quite a few times. Since my site visit, he habitually takes his shotgun with him to the chicken field.

Audible scarers: Gas-cannons and other loud audible devices cannot be used regularly in the field since these would distress the chickens too much and could therefore potentially reduce egg production.

Guard companions: A few geese put in with the chickens formed their own separate huddle and failed to keep Buzzards away. Not aware of any other companion species that could be safely left in the field, that instinctively chases birds of prey and not hens.

Visual scarers: A scarecrow with a florescent jacket was ineffective. Not sure this was particularly life-like or was moved around.

Moving the chicken sheds: The 4 or 5 chicken sheds used to be widely spaced around the field to allow the hens to make full use of the field. Since it was discovered that Buzzards were predating hens near the perimeter fence, [redacted] clustered the sheds within a 20-metre zone and has kept the hens within a non-electrified fence, now allowing access only to a small portion of the field, but the perceived advantages are that hens are kept close to the sheds for cover and away from most of the perimeter fence. Unfortunately, as a consequence, Buzzards are predating chickens much nearer the sheds and the chickens are coincidentally failing to lay, possibly a result of stress induced from the presence of the Buzzard or perhaps also from their sheds being moved.

Aerial cover: [redacted] created a suspended fan pattern of non-electrified tape near the chicken sheds within the restricted foraging area, stretching from an old trailer (left for cover) and a row of fence-posts. This created a one metre high 'covered' area under which chickens can scratch around. However, signs are that a Buzzard glided under the tapes, took a chicken and the trail of scattered hen feathers leads under the taped area.

Egg protection: hens laying their eggs in the sheds are safe by rolling away into troughs designed to prevent crow from taking them. This is successful.

Fencing: a 6-foot partly electrified fence has largely curtailed Fox predation. The electrified strand is suspended angled out, leaving the fence-post tops exposed, or so I recall. There are now many fence-posts and telegraph poles for Buzzards to perch on. Proofing them all might be considered impractical, although banging a 6" nail into the top of every post and contacting the electricity company to allow its poles to be proofed, has been suggested. The field has a perimeter of 864 metres. Assuming a standard spacing of 3 metres, this gives a total of 288 fence-posts that need proofing, an undertaking which would be of little additional benefit unless the telegraph poles, which run across the field, were proofed too.

Diversionary feeding: [redacted] described how Buzzards appear to prefer a fresh kill, ignoring their own kills from the night before. Although Rabbits are locally numerous, it is believed that two individual Buzzards are frequently targeting chickens, perhaps due to being easier prey to catch than Rabbits. This method has the disadvantage of likely attracting more predators into the area, rather than distracting particular individual birds.

The chickens do not readily run for cover, and although huddle and sometimes crowd around the sheds, they instinctively crouch when alarmed, making them vulnerable to predation in an open area. This is a free-range farm so permanently housing the chickens to prevent predation is not an option for the owners.

Summary of preventative measures
Despite having their foraging range dramatically reduced to keep the hens close to the sheds, and having a trailer and tape covered zone, the hens are still being predated. Human presence scaring was further increased following my visit and was borderline impractical to sustain during Nov/ Dec, but unfortunately only a slight decrease in predation levels has been noted. The amount of additional aerial or brash pile cover needed and proofing of fence-posts and telegraph poles needed, and other visual aids to scaring also needed to further reduce the rate of predation again to an acceptable level may be considered impractical.

Proposal
The application form stated a proposal to shoot Buzzards during the period Nov 2011 to Jan 2012. I explained to [redacted] (in Feb 2011) that due to the long deferral period, the licensed period will reflect the need to reduce predation, but may take into account other factors, such as when Buzzards may have dependant young. [redacted] are named as authorised persons. [redacted] said he was prepared to shoot Buzzards himself as a last resort. Use of a hide and a shotgun was muted as the preferred method. If a licence was issued, I agreed with this approach, though suggested this may need to be in conjunction with additional preventative measures, in case more than one Buzzard is responsible.

Consequences of not taking action
The business is currently losing money and at best runs on tight margins. If predation continues at a similar rate, [redacted] believe they will not be able to support the business.

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

Colleague/body Consulted	Date of Consultation	Date Response Received

7. Consideration of Conservation Factors

The Common Buzzard *Buteo buteo* has experienced a significant range expansion and population increase in recent decades. The BTO's CBC/ BBS Index 1966 – 2008 shows a 606% increase (395 – 1525% confidence limits). "The increase has been associated with rapidly improving nesting success, perhaps through reduced persecution, the recovery of rabbit populations from the effects of myxomatosis and release from the deleterious effects of organochlorine pesticides (Elliott & Avery 1991, Clements 2002)"; see link: - http://www.bto.org/birdtrends2010/wcrbuzza.shtml

The dust cover of the last published national breeding bird atlas shows rather well the status of Buzzard 20 years ago. [redacted].

[2] Gibbons, Reid & Chapman. 1993. *The New Atlas of Breeding Birds in Britain and Ireland: 1988 – 1991*. Poyser.

[redacted]

8. Disease Considerations

Is the proposed action likely to present a disease risk to wildlife, domestic animals or people? No *If "yes", a Disease Risk Assessment (DRA) is required for this case. Consult the SOP for guidance.*
Consideration of 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 • have non-lethal methods been used? • have they been found to be ineffective or impractical and not just difficult to implement?	 Yes Yes
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

Application signed and dated: **29/09/2011** Application received by WLU: **03/10/2011**
Application emailed to [redacted] Advisers: **04/10/2011** Application received by Adviser [redacted]): **10/10/2011**
Site visit [redacted]) **19/10/2011** Visit report and clock-stop email to WLU: **24/10/2011**
Contacted [redacted]; consulted with [redacted] ([redacted] updated assessment report: **02/12/2011**
Emailed assessment report to [redacted] for peer review: **05/12/2011** Comments received: **09/12/2011**
Emailed assessment report to [redacted] for peer review: **15/12/2011**
Spoke to the applicant and emailed assessment report to [redacted] for peer review again: **27/02/2012**

Conclusion

[redacted] run a free-range organic laying hen business at a smallholding in [redacted]. Buzzard predation has accounted for the loss of c.52 hens since Jul 2011, and previously another 12 hens were lost during hard weather last winter (Nov 2010 to Jan 2011).

A range of calculations were performed to estimate the level of financial damage. Taking into account costs for replacing predated hens, revenue lost from egg production and indirect savings made by, e.g. not having to feed hens lost to predation, I estimate the business has lost [redacted] as a direct result of Buzzard predation during the period Jul 2011 to Feb 2012.

This is a small enterprise comprising of 600 - 700 laying hens making an annual profit of approximately [redacted]. Financial losses to date (Feb 2012), expressed as a proportion of the estimate net annual profit, is **7.25%**. The total number of hens lost to predation (total = 52) to date (Feb 2012), as a proportion of the current flock size (600), is **8.67%**.

When considering thresholds for relative damage, I regard a loss within the double-digit percentage range, or/ and a loss expressed as being in the region of £100s, as significant. At present, I consider this case to be nearly at the threshold of significant damage in terms of percentage losses, but with an annual financial loss of many [redacted], the evidence suggests **significant damage**. This particular case involves a small private enterprise with narrow profit margins.

Despite enhancing scaring measures, altering the chicken shed configuration, providing more cover and resolving losses to other predation, the business continues to lose its laying hens to Buzzard predation. Non-lethal preventative measures have not been effective at reducing predation enough to an acceptable level. Although the rate of predation appears to be lower since [redacted] introduced enhanced preventative measures, predation continues and rose sharply during the cold spell in early Feb 2012.

Additional preventative measures were suggested. Proofing every one of the hundreds of fence-posts around the field and the telegraph posts might help, but will not prevent Buzzards from being able to enter and land on the field amongst the hens. Diversionary feeding could be counterproductive here by attracting more predators. Better use of life-like scare-crows was encouraged during my site visit, instead the applicant visited the field more frequently throughout the day, but with only modest success at reducing the predation rate. Other factors, such as weather, seem more influential on Buzzard presence than scaring effort.

Despite being locally numerous, hen predation appears to be the work of just one, probably two individual Buzzards. The problem could be resolved by targeting and dispatching these particular birds. The local population will not be adversely affected by the loss of two Buzzards. Regular lethal control at this site is not anticipated.

Recommendation

I suggest this application and assessment report are forwarded for peer review and considered as a candidate for permitting lethal control of a bird of prey (Buzzard). Licensing could potentially be justified under s.16 (1) (k) “for the purposes of preventing serious damage to livestock...” Although targeting and despatching particular individuals, the scaring regime should remain and be maintained.

11. Attachments

N/A

REVIEW OF LICENSING CASE

Nature of licence application:	**An application for a licence to control common buzzards to prevent predation on free-range chickens** [redacted]
Case reference:	**WLM/2011/1801**
Date:	**29 March 2012 (revised 27 April 2012)**
Reviewer	[redacted] **(Principal Specialist –** [redacted]**)**

Recommendation

It is recommended that a licence is issued to permit two Common Buzzards to be shot. The aim will be to remove the birds (believed to be a pair) that are predating the chickens. These birds have become habituated to the deterrents used by the Applicant to protect his poultry flock.

Licensed action should be closely monitored by Natural England

To note

If a licence is issued then this will be the first licence to control buzzards to protect farmed poultry issued by Natural England.

Background

1. A modest–sized free-range, organic chicken egg business in [redacted] has been suffering predation by Common Buzzards (*Buteo buteo*). The business started four years ago and started experiencing predation in November 2010. From July 2011 – February 2012 it is reported that 52 chickens were predated by buzzards, and predation is reported to be continuing. This is a relatively small business with 600-700 chickens and an annual profit of about [redacted]
2. Natural England has previously received a small number of applications to control buzzards in response to predation claims (for farmed poultry, game birds and red squirrels). To date, no licences permitted lethal control have been issued.

Timing

3. Urgent. Ideally, licensed action should be taken before the buzzards have dependent young (for welfare reasons). Delaying until after young are fledged risks a period of increased predation while the adults feed young (the most significant period of predation during 2011 was coincided with the breeding season).

Consultation

4. Defra (Biodiversity) is aware of this case and has been kept informed throughout, and has been advised that we are "minded to issue" a licence (27/02/2012). We have received no specific advice on handling to date.
5. There was no case-specific consultation with Natural England ornithologists in respect to conservation issues as previous advice was applicable (i.e. removing such small numbers of common bird of prey will not adversely impact its conservation status).

6. The Adviser's case assessment was peer reviewed by the relevant [redacted]), who has endorsed the recommendation.

Policy

7. Natural England determines licences under this legislation and for this purpose on behalf of the Secretary of State. We do so in accordance with the law and any policy guidance issued to us.

8. This is a novel application type for which there is no specific policy guidance. On the advice of Defra (24 June 2011) this application has been judged according to the existing general policy guidance. The relevant guidance is provided in the following published documents:

   - Policy Statement – Species licensing under Part 1 (excluding section 14)[1] and
   - Defra wildlife management policy[2]. This is an overarching statement of policy explaining the approach for differ groups of species according to conservation and legal status. The Common Buzzard falls within the 'other protected species' category of this guidance.

9. The second of these documents states (in respect to the licensing of 'other protected species')

   'As the legislation generally prohibits lethal control, Defra policy is to issue licences to kill in defined circumstances where 1) all other reasonable non-lethal solutions have been tried and/or shown to be ineffective and 2) there is a genuine problem/need; 3) there are no satisfactory alternatives; 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.'

10. This policy guidance does not rule out or set special criteria for licensing the control of birds of prey; nor does it not set specific thresholds for judging serious damage or the level of evidence required to obtain a licence, either generically or for different species or situations (for the cormorant, where evidence requirements are set, there is separate policy guidance).

11. While judgements are expected to differ between species (e.g. because of ecological or behavioural differences) and situations (e.g. public safety is a strong ground for issuing a licence) Natural England does need to demonstrate consistency in applying the policy or have a sound justification for varying requirements[3]. By way of context, this policy guidance applies to applications for a wide range of protected species which are neither rare nor endangered. This includes the issue of the general licence[4] for the control of certain corvid, gull and pigeon species to prevent serious damage to livestock, foodstuffs for livestock, crops, etc (issued under section 16(1)(k)). It also applies to individual licences issued for a wider range of wild bird species (e.g. greylag geese, herons, herring and great black-backed gulls).

[1] Policy statement: http://archive.defra.gov.uk/wildlife-pets/wildlife/management/documents/section16excludingrelease.pdf
[2] Defra Wildlife management policy: http://archive.defra.gov.uk/wildlife-pets/wildlife/management/documents/overarch-policy.pdf
[3] For example, there may be an existing well-documented body of evidence demonstrating that a species causes a specific problem, thus negating the need for applicants to provide detailed evidence on a case by case basis. This may not be the case for another species, particularly species that are not normally licensed.
[4] General licence WML-GL04 http://www.naturalengland.org.uk/Images/wml-gl04_tcm6-24149.pdf

12. Where Natural England is satisfied that an application satisfies the legislation and the relevant policy guidance then it should issue a licence (noting the explicit stipulation in the Defra policy statement that licences '*should not be unreasonably withheld or revoked*').

Assessment

13. The application and the Adviser's assessment and recommendation have been reviewed against the five principles applied by Natural England to licence decision-making.

Principle 1: There is a genuine problem to resolve or need to satisfy for which a licensing purpose is applicable

14. I am satisfied that there is sufficient evidence to show that there is a genuine predation problem and that buzzards are likely to be responsible for the predation of chickens[5].

15. Licences may be issued under the Wildlife and Countryside Act 1981 (as amended) ("the Act") derogating to protection afforded to wild birds, such as buzzards, for the purposes of '*for the purposes of preventing serious damage to livestock* ...' (section 16(1)(k)). The term 'livestock' is considered to include farmed poultry; thus, there is a suitable purpose.

16. Whether or not a licence under this purpose is applicable in this case thus hinges on whether the level of predation attributed to buzzards constitutes 'serious damage'. There is no specific guidance from the European Commission or Defra to on measuring 'serious damage' so it is necessarily a judgement that we must make on a case by case basis.

17. From July 2011 – February 2012 it is reported that 52 chickens were predated by the buzzards and it is fully expected that predation will continue. This is a relatively small business with 600-700 chickens and an annual profit of about [redacted]. The losses attributed to buzzard predation are estimated to represent a cost of about [redacted] or 7.25% of the net annual profit.

18. The Applicant recently confirmed (18 April 2012) that predation is continuing and that since February they have been losing about 4 birds each week to buzzard predation.

19. The level of reported chicken losses to buzzards in this case (estimated at about 7-8% of the initial flock) is well in excess of the total predation losses (i.e. including foxes etc) reported as typical for the industry in a survey of British free-range poultry farms (average 2% for egg-laying units)[6] and thus can be considered to be exceptional and well above the level of losses that a poultry producer would normally expect to suffer and factor into their business.

20. There was also some evidence that a decline in egg production in October may have been caused by the buzzards, either through the stress of predation or indirectly, as a result of crèching the chicken sheds to reduce vulnerability to predation. The Applicant now considers this to have been most likely the result of a feed problem.

21. In my view, predation losses on the scale reported for a business of this size can be reasonably considered to represent 'serious damage', which is the conclusion of the Adviser. In the absence of specific guidance stipulating thresholds or means for evaluating 'serious', this remains a judgement and would be open to challenge.

[5] The Applicant has reported (18 April 2012) witnessing a buzzard predating a chicken whilst they were present.

[6] Moberly, White and Harris (2004) Mortality due to fox predation in free-range poultry flocks in Britain Veterinary Record ; 155, 48-52: http://veterinaryrecord.bmj.com/content/155/2/48.full.pdf+html

Principle 2: There are no satisfactory alternatives

22. The Act stipulates that licences shall not be granted unless the licensing authority is satisfied that there is no other satisfactory solution (sub-section 16(1A)(a)). In the Adviser's view, with which I concur, this requirement is met in this case. The Applicant has attempted a wide and suitable range of non-lethal, legal measures to prevent or at least reduce predation to an acceptable level; these have so far failed to prevent serious damage occurring.

23. Diversionary feeding is considered to have potential for mitigating buzzard predation problems in certain circumstances (e.g. during releases of game birds). It would not be appropriate in this case as the chickens are vulnerable (and were predated) all year round. If used in this situation diversionary feeding would risk supplementing the buzzard diet and potentially increasing the density of predators (and thus, ultimately, the predation risk).

24. In selecting the appropriate licensed option the Adviser has selected a measure that offers a reasonable chance of success, but which minimises the number of buzzards killed. The choice is appropriate in the context of this principle, and the rational is examined further in the 'Options' section, below.

Principle 3: The licensed action will contribute to resolving the problem or meeting the need

25. The option recommended by the Adviser, namely targeting the problem birds, is untried in the context of buzzard predation, but that is unsurprising as licences have not previously been issued to control buzzards (or other raptors) in this type of situation. There is, thus, a degree of uncertainty regarding the likely success of the proposed approach. This cannot be eliminated without either trying it or commissioning research.

26. For the reasons given in the Options section, I am satisfied that this approach has sufficient merit and a reasonable likelihood of success to justify sanctioning. I recommend that licensed action is monitored to evaluate its success and thus inform decision-making in future cases.

Principle 4: The action to be licensed is proportionate to the scale of the problem or need

27. The approach recommended will aim to target the specific buzzards predating the chicken flock, rather permitting more general control of buzzards in the vicinity.

28. The predation problem was first recorded in late 2010, has continued since. It is very likely that it will continue in future as buzzards are long-lived and have relatively stable territories so having homed-in on this food source the birds are likely to continue to exploit it (i.e. this is not a one-off incidence of predation).

29. The approach recommended is, therefore, proportionate to the scale of the problem in my view.

Principle 5: The licensed action will not have an adverse effect on the conservation status of any species or habitat

30. The Common Buzzard is an abundant and widespread species which has undergone a significant increase in population over recent decades. The removal of small numbers of individual birds will not adversely impact the population in the region (where the species is very well-established) or nationally.

Overall evaluation against Principles

31. The assessment of this case and the Adviser's recommendation is, in my judgement, consistent with Natural England licensing principles.

Consistency with Defra policy

32. The assessment of this case and the recommendation is, in my judgement, consistent with relevant Defra policy guidance for licensing.

Options

33. There are two principal options available:

A. **Reject the application**

Grounds: Conclude that while the assessment and recommendations are consistent with licensing principles and policy, the case is not strong-enough to justify the issue of a licence because:

(i) Damage is significant but not sufficiently serious, and / or

(ii) There is too much uncertainty regarding the likely success of the proposed licensed action in alleviating the predation problem

Next steps: Advise the Applicant to continue non-lethal, legal methods of minimising buzzard predation. This will mainly be a case of recommending a continuation (and perhaps enhancement) of current approaches as there are no additional non-lethal measures that are practicable and reasonable that would be expected make a marked difference to current efforts to protect the chickens.

B. **Issue a licence to shoot the buzzards**

Grounds: Accept the assessment and recommendation made by the Adviser.

Next steps: Issue a licence for to allow 2 birds to be shot, with the aim of targeting the birds predating the chickens. The conditions of the licence should seek to maximise the chances of targeting the problem birds (e.g. only permitting shooting of birds in the immediate vicinity of the chicken pens or by trapping the birds within the pen). Licensed action should be closely monitored by Natural England.

34. The following licensable options are ruled out as alternatives (on a stepwise scale of increasing 'impact' on the protected species, alternatives (i) and (ii) are judged to have a lower 'impact' than the recommended Option B):

(i) Nest (including egg) destruction: the nest is not located on this small-holding and its location is unknown; this is therefore not a realistic option.

(ii) Shooting to reinforce scaring: this is unlikely to have a beneficial effect on a paired, territorial species such as a buzzard.

35. Option A is unlikely to result in a significant reduction in predation levels as the range of deterrent methods already employed is (consistent with a judgement of what is 'reasonable' in these circumstances) comprehensive. Continued predation is therefore anticipated.

36. Option B is untried as a method for managing buzzard predation (at least in the UK context), but it is considered likely that it will provide a benefit, at least in the short to medium term. Anecdotal observations reported by the Applicant suggest the same pair of buzzards (and particularly one large bird) is targeting this small-holding and that these birds developed a pattern of predating on the chickens, despite deterrents (such as shooting to scare) and other protective measures. As buzzards are territorial (with reasonably stable territories) and long-lived, it is likely that they will continue to predate the chickens at current levels. This behaviour may also be passed to their off-spring.

37. If these birds are removed it is likely they will replaced by another territorial pair within a relatively short period of time. The expectation, however, is that a new pair will not have the same learned chicken-predating behaviour and will be more susceptible to deterrents and physical protection measures.

38. A recent Fera desk study of raptor predation problems (commissioned by Defra and not yet published) reports that the United States Fish and Wildlife Service (USFWS) issues shooting permits for problem raptors where non-lethal methods of controlling damage have failed, but the report does not comment on the efficacy of this strategy.

Conclusions

39. Small numbers of applications of this type have been received previously (usually <1 each year) but no licences have been issued to date. Typically, previous applicants have failed to provide convincing evidence that buzzards are responsible for the damage or that the damage is serious, or they have not sufficiently explored alternative approaches to reducing predation.

40. This case stands out from previous buzzard predation cases because of the persistence of high levels of buzzard predation despite a concerted effort to reduce predation losses from all sources. The Applicant has largely eliminated fox predation – by far the major source of predation at free-range poultry units according to a published study (Moberly et al 2004) - by installing a £6,000 fence, yet in spite of this, and determined efforts to deter buzzards, the level of predation reported is about 4 times higher than the industry average for all predators, including foxes.

41. Due to the severity of damage and the lack of remaining options to prevent predation by non-lethal means, it is my view that a licence is justified. If we were dealing with a corvid, gull, heron or cormorant species then there can be little doubt that a licence would be deemed justified on the basis of the scale and evidence of damage presented and the effort invested in preventing damage by non-lethal means. In accordance with current government policy there are no grounds for Natural England to treat birds of prey as special cases with different thresholds of proof.

42. Where there is greater uncertainty is in the choice of remedial method to be sanctioned; this is due to the absence previous cases to inform that choice. As a general approach, Natural England promotes a stepwise strategy to conflict resolution, favouring the option with least impact on a protected species, moving to other measures with greater impacts only if the favoured option fails or is judged unlikely to succeed.

43. In this case, the preferred option is to seek to target the birds (believed to be a territorial pair) which are predating on chickens. We do not know for certain, however, that it is only certain birds responsible for predation, although this is likely based on the Applicant's observations. Furthermore, we do not know for certain if this approach will succeed in alleviating the problem and for how long. That said, predation on chickens does not appear to be a common behaviour amongst buzzards (as we have received so few licence applications to date) so it is possible that the behaviour of these birds is exceptional. If that proves to be the case, then removing the problem birds could provide a long term benefit for the Applicant.

44. On balance, and taking all factors into consideration, I recommend that a licence is issued to permit two Common Buzzards to be shot. The aim should be to target the birds that are predating the chickens. Licensed action should be closely monitored by Natural England.

45. If this action does not alleviate the problem then I advise a detailed reappraisal of options before permitting further birds to be killed. The decision here is to allow a one-off operation to remove birds that (appear to) have developed a habit of

predating on the chickens, rather than accepting that the control of buzzards is justified on a regular or long-term basis.