Written evidence submission to the 2019 Defra consultation into General Licences

Who we are

This submission has been produced by the Game & Wildlife Conservation Trust (GWCT), a research and education charity that has published over 100 scientific papers in peer-reviewed journals on issues relating to predation control and farmland and moorland birds over the past 50 years. On the basis of our scientific expertise and credibility, we regularly provide advice to such statutory bodies as Defra, Scottish Natural Heritage, Natural Resources Wales and Natural England. We also provide practical advice to farmers, landowners and other conservation organisations on how to manage their land with a view to improving biodiversity. Our Advisory team have, for many years, run industry-leading best practice predation control training courses. These courses are based on practical experience backed up by GWCT science.

Summary

1. The GWCT believes that the General Licence system was the most satisfactory solution to perennial problems that are commonplace but also dispersed, seasonally brief, and difficult to predict; and where local and temporal circumstances affect the success of both non-lethal or lethal control measures.
2. We understand there is a requirement for Defra, on behalf of the whole UK, to satisfy the European Commission that the proposed derogation is the only satisfactory solution to a problem and is performed in a considered manner that does not imperil target species. The regulatory mechanism through which that derogation is allowed and overseen is an internal matter for the UK, although the WCA requires that the licensing authority believes its policy (i.e. making lethal control an available option through a system of General Licences) to be the only satisfactory solution. The condition in the General Licences post-2005 that in each individual case practitioners themselves must be satisfied that non-lethal methods are unsatisfactory does not appear to be required by the primary legislation and historically did not arise in order to delegate responsibility to individual practitioners. The requirement of 'last

resort', in our view, applies sensibly to the derogation as a whole; not to each and every case of its use, which would be impractical or impossible to ensure.

3. We highlight scientific evidence that predation control carried out under General Licences can lead to annual increases in breeding densities of a range of red-listed birds (e.g. grey partridges 35% increase per year, curlew 14% increase per year). We also highlight numerous case studies where farmland birds have responded positively to predation control.
4. We present new scientific evidence that corvid removal positively impacts songbird populations locally. This new evidence strongly suggests that the national figures will mask local patterns.
5. The withdrawal of General Licences and subsequent delays in issuing new licences at a critical time of year for livestock, and for protection of spring-drilled crops and vulnerable nesting birds, has caused significant problems for farmers, livestock and wildlife.
6. A member survey (450 responses) highlighted direct impacts on songbirds, waders, gamebirds and crop damage as a result of the withdrawal of General Licences on 25 April 2019.
7. The member survey highlighted that on many farms, the success of government-funded agri-environment schemes has been compromised by the withdrawal of General Licences.
8. New licence conditions render the licences more confusing, more restrictive and less effective.
9. Some new licence conditions will likely be counter-productive for the conservation of nesting birds (e.g. the requirement to scare birds in areas where vulnerable birds are nesting).
10. The GWCT looks forward to playing an active role in the planned review of General Licences later this year, but in the meantime calls for a simple interim General Licensing system to be installed immediately, to allow land managers to get back to undertaking effective control of certain bird species where they are causing problems.

1. Background

Natural England revoked three General Licences (covering 16 largely commonly occurring bird species, including corvids and pigeons) on 25 April 2019 as a result of a legal challenge from Wild Justice (set up by wildlife campaigners Mark Avery, Chris Packham and Ruth Tingay in February 2019). Natural England conceded that the licences as then issued were unlawful, hence the revocation. The decision has caused huge concern with licence users (mainly farmers, conservationists and gamekeepers) who were no longer licensed to undertake lethal control measures for birds damaging crops or injuring and killing newborn lambs, or in protecting the nests and chicks of birds of conservation concern such as lapwing and curlew. There has been significant uncertainty and disruption, and a range of views has been expressed publicly about the effects of the action that Natural England has taken on businesses and wildlife.

On 4 May 2019, the Secretary of State for Environment, Food and Rural Affairs and Natural England agreed that the legal powers relating to these General Licences would be exercised by the Secretary of State from that date. Defra has undertaken a short evidence-gathering process to gain a clear understanding of the implications of the licence revocation on the protection of wild birds, and the impacts on crops, livestock, wildlife, disease, human health and safety, and wider nature conservation efforts. The evidence gathered from this, along with the information that Defra and Natural England have already received since 25 April, will inform their future approach in order to get back to a satisfactory situation. Our evidence is based on a combination of 1) scientific research, 2) our understanding of the legal framework, 3) practical experience of operating under General Licences, and 4) experience of over 450 members who responded to the call for evidence.

2. Our understanding of the legal framework for issuing General Licences

GWCT is probably the non-government organisation that has had the longest involvement with General Licences in the UK. We have no legal expertise. Rather, this submission is based on our understanding of the nature and intention of General Licences as opposed to Class or Individual Licences, and our knowledge of the history of their development in the UK and our view of practicalities.

EU Birds Directive (1979, 2009), Article 9

1. Member States may derogate from the provisions of Articles 5 to 8 [which establish basic protection for all birds, restrict hunting seasons, etc], where there is no other satisfactory solution, for the following reasons: …etc

The Member State must send a report to the European Commission (EC) every year stating the nature of each derogation, how it has been implemented, and what 'controls' (i.e. checks, monitoring, data gathering) were carried out. Reporting is done online via the HaBiDeS portal with the aim of ensuring consistency of information across Member States. The UK has made annual submissions since at least 1996, the last occasion (report for 2017) being September 2018. A review by the EC in 2005 noted that "none of the UK derogations is in apparent conflict with the protection of the species".

As Article 9 relates to the Member State level, we suppose the word 'solution' applies to the derogation not to the means of regulation within the Member State. If the Member State considers the management of a particular problem cannot be achieved satisfactorily without allowing the option of lethal control, it may derogate provided it can satisfy the EC on the provisions mentioned.

WCA (amended 1995), Section 16

The provision for licenses to be granted existed in the WCA (Section 16(1)) from its enactment in 1981, permitting actions which would otherwise be an offence under WCA.

Section 16(1)(A) was added in 1995 to adopt the requirements of the Birds Directive.

(1A) The appropriate authority—

(a) shall not grant a licence for any purpose mentioned in subsection (1) unless it is satisfied that, as regards that purpose, there is no other satisfactory solution; …etc

At the same time, the old 'pest birds' Schedule 2 was deleted from the WCA, so that control of these species could continue only if the UK chose to derogate. This would be achieved by issuing licences.

Again, we suppose the word 'solution' applies to the policy, not to the otherwise-proscribed method of control. Both before and after 1995, licences could be made as general or as specific as was considered appropriate. Thus, if the nature of the problem warrants it, the policy could be to issue a General Licence allowing the option of lethal control at the discretion of the practitioner.

The first General Licence?

We believe the first General Licence in the UK was issued in 1991 by Defra's predecessor the Department of the Environment (DoE), allowing the use of Larsen traps with a decoy to catch corvid birds. The offence avoided in that case (WCA S.8(1)) was holding a bird in a cage too small for it to stretch its wings freely, which was apparently aimed at long-term housing for birds. GWCT presented a cost-benefit case to MAFF, DoE and the Nature Conservancy Council (forerunner of NE) that predation by corvid birds was a serious issue for native ground-nesting birds, and that there was no other satisfactory (effective and legal) solution, tempting some practitioners at that time to make illegal use of poisons; and that the Larsen trap provided a highly focussed and efficient control method that allowed the rapid removal of territorial corvids before dependent young became an issue. The purpose of S.8(1) was unaffected because it was not intended that

birds would be held in the traps for long periods; this was supported by conditions in the licence, which also reminded licensees of their responsibilities under other legislation (notably the Animal Welfare Act).

What does 'satisfactory' mean in the case of a General Licence?

Neither the EU Directive nor domestic UK legislation suggest how 'satisfactory' is to be determined, but presumably there must be some form of cost-benefit analysis. Wildlife problems are complex, and what works at one time and in one situation may not work in another. The justification for a General Licence is that making the option of lethal control available alongside non-lethal methods provides the only satisfactory approach to a widespread problem, provided measures are in place to monitor the target species and ensure that its conservation status is not impaired.

The point of a General Licence is that generalities can safely be made, when licensing on a more individual basis would be inappropriate. It is fundamental to establish whether lethal control can be an effective option, but it is not a necessary part of the case to show that it is invariably effective, or that non-lethal options are invariably ineffective. Non-lethal methods may be partially or inconsistently effective but in general unsatisfactory. In specific circumstances either lethal or non-lethal approaches may be inappropriate or ineffectual or damaging to some other interest. Making the full range of options available to all is thus a defensible approach. Similarly, it is not necessary to wait and see whether each individual of an opportunistic predatory species turns out to be predatory in the specific circumstances facing each practitioner.

A further argument might be that the target species is disproportionately abundant as a result of human land-uses, justifying the reduction of density on a local and temporary basis to allow a particular human activity or ecological process to succeed, while not damaging the conservation status of the target species at a national level. It would also be relevant to note that issuing individual licences on an annual basis for this widespread purpose would be disproportionately burdensome.

To summarise, one can argue that the issue of General Licences by the UK is the most satisfactory solution to perennial problems that are commonplace but also dispersed, seasonally brief, and difficult to predict; and where local and temporal circumstances affect the success of both non-lethal or lethal control measures.

At what level is 'satisfactory' determined?

The Birds Directive clearly relates to compliance at a Member State level: each Member State must legislate to deliver the Directive and is answerable to the EC for derogations. The WCA as amended in 1995 is the domestic vehicle that delivers the Directive in the UK, and it defines the licensing mechanisms by which the relevant authority can allow actions to take place which constitute a derogation. Because this authority is now devolved, licences are issued separately by each national countryside agency, but the UK remains answerable to the EC for all of them.

General Licences to allow continued lethal control of many bird species formerly on the old Schedule 2 were made in 1995. In 2005, Defra proposed to introduce a new clause into these licences requiring each practitioner to demonstrate that non-lethal options had been tried and were unviable. GWCT, BASC and NGO argued strongly against this, saying that the licensing authority (at that time Defra) held responsibility under the Directive for the derogation, not the individual. After consideration, Defra accepted this and toned down the proposed wording to say that the practitioner must satisfy his/herself that non-lethal methods 'are either ineffective or impracticable'. We felt – and still feel – that this was an unnecessary addition with no benefit.

In 2019, perhaps because they have no organisational memory of those early Licences, Natural England (the current licensing authority) apparently believed that responsibility had been off-loaded onto the individual practitioner. That was certainly not the case. We do not recall in what year NE was given responsibility for issuing and renewing General Licences, but they inherited a stable situation. In first issuing and defending the derogations annually to the EC, DoE and later Defra had clearly been satisfied that while non-lethal methods were widely available and often used, lethal methods were also required; and that regulation

through General Licences - rather than Class or Individual Licences - was the only satisfactory approach to the situation. To inform this decision, Defra had commissioned a review of the methods from their own agency, Central Science Laboratory (Bishop et al 2003). There have been no significant advances in non-lethal methods that would change the options. Although data on the numbers of birds killed under General Licences are not collected centrally, the conservation status of target species is monitored by BTO through survey schemes that are supported by Government grants.

In England, Wales and Northern Ireland the General Licences have been re-issued without significant change since 2005, with Defra and latterly NE renewing them and submitting details annually to the EC. Given that there have been no significant changes in recent years, the process has been largely a formality, requiring no in-depth review. In Scotland, a thorough review of licences to kill corvid birds was carried out in 2016. This resulted in minor changes to the General Licences in Scotland only.

In summary, we understand there is a requirement for Defra, on behalf of the whole UK, to satisfy the European Commission that the proposed derogation is the only satisfactory solution to a problem and is performed in a considered manner that does not imperil target species. The regulatory mechanism through which that derogation is allowed and overseen is an internal matter for the UK, although the WCA requires that the licensing authority believes its policy (i.e. making lethal control an available option through a system of General Licences) to be the only satisfactory solution. The condition in the General Licences post-2005 that in each individual case practitioners themselves must be satisfied that non-lethal methods are unsatisfactory does not appear to be required by the primary legislation and historically did not arise in order to delegate responsibility to individual practitioners. The requirement of 'last resort', in our view, applies sensibly to the derogation as a whole; not to each and every case of its use, which would be impractical or impossible to ensure.

Reference

Bishop J., H. McKay, D. Parrott and J. Allan (2003) Review of international research literature regarding the effectiveness of auditory bird scaring techniques and potential alternatives. Report to Defra.

3. Predator control as a conservation tool

3.1 Introduction

A great many declining or endangered species of wildlife are in such a parlous condition because of the loss of their habitat. Either the amount of their habitat or its quality have reduced. Nearly all conservationists agree that the answer to these problems and so the road to species recovery will be achieved through improvements to habitat.

The GWCT takes no exception to this response. In fact, the Trust's work on the management of arable crop edges (conservation headlands, beetle banks, extended field margins, wild bird seed covers) pioneered the provision of suitable habitats for nesting, wintering and chick-rearing habitats for wildlife on farmland, and the selective use of pesticides on arable land to support wildlife.

There are very many examples of where the provision of habitat has halted the decline of a species and initiated recovery. For UK birds, we can cite bittern, cirl bunting, corncrake and many more where this has happened. But there are species where the provision of habitat alone has not halted declines or brought about recovery. Examples include grey partridge, brown hare, water vole, black grouse, lapwing, curlew and possibly more.

The strongest evidence for these improvements following predator removal comes from large-scale, long-term, manipulative experiments whose findings have been published in peer-reviewed journals where predators are legally removed from an area and the responses of their prey monitored in comparison to areas of similar landscapes where predators remain. In the pantheon of experimental approaches, these

randomised, replicated removal experiments are considered the best way to identify the importance of predation. The GWCT has conducted three, and results are reported here. Academic ornithologists and other UK-based wildlife charities agree and have gone into print confirming this. They also agree that the experimental approach is more robust than the correlations of various datasets e.g. the correlation between increasing corvid numbers and declining songbird numbers. Statistically significant correlations do not indicate cause and effect and can be caused by unmeasured factors. The absence of a significant correlation may indicate weak investigative methodologies. But manipulative experiments conducted by the Trust on Salisbury Plain and Otterburn, and the large-scale demonstrations at Royston, Loddington and elsewhere, provide this evidence.

The GWCT does not believe that predation caused the decline of these species, although it may have contributed. But we do believe that predation is playing a role in preventing recovery even in the presence of sufficient quality habitat. We also believe that legal, seasonal predator control, as prescribed by current wildlife and welfare laws, including the General Licences, is an important 'tool' in the conservation recovery 'toolbox' and that, for some species like curlew, every measure in this 'toolbox' should be deployed immediately to avoid the direst of consequences.

We face an uncertain future. The recently published report *The State of Nature* made depressing reading, with documented problems and species declines very apparent. With the consequences of climate change and post-Brexit support uncertain, how should the conservation community, government, their statutory agencies and policymakers view predator control to halt species decline?

To the GWCT, predator control consists of three things:

1. Only species that the law allows can be taken.
2. Only legally approved methods can be used, so no poisons or traps not meeting international welfare standards.
3. In most cases, predators are only removed during the breeding season, say mid-March to mid-July.

So, crows and magpies are rarely killed in December. We recognise that crows are not predators of adult birds in the winter, so they do not need to be removed. Removing birds in the winter may disrupt territories that are simply replaced by the following spring.

Concentrating predator control during the breeding season seeks to reduce (not eliminate) losses of breeding birds and their eggs. We do not seek to eliminate predation – we can't – but we can reduce it to ensure more birds breed successfully to produce fledged young. At our demonstration farm at Loddington in Leicestershire, we implemented a programme of predator removal using the General Licence to remove corvids to protect gamebirds and songbirds. Here, with predator control, we experienced 40% nest loss of wild pheasants. Without predator control, we experienced 80% loss. The difference meant that a population of wild birds could be built up over five years. There were still predation events, but not at a level that previously prevented population increase.

Loddington was an 'island' of predator control surrounded by a 'sea' of foxes, crows and magpies. As the Loddington predators were removed, others moved in from outside the farm, across our farm boundary, but the disruption caused by the removal of our territorial predators early in the season and the inexperience of the incomers is thought to have provided a sufficient period of respite to allow their prey to breed more successfully.

An observation we make from our experiments and from the predator bag statistics that we collect in our National Gamebag Census scheme is that the annual take (or bag) of predators changes very little between years. This is often cited as a reason why predator control is not effective or a long-term, sustainable solution. We often hear that, "Surely predator control is not working if you have to kill the same numbers of predators each year?" The seasonal nature of predator removal provides the respite described above in which a window of opportunity to breed more successfully can be provided. Predators are removed but

numbers fill back in after the breeding season. But during the breeding season, predator removal leads to more successful breeding of prey species.

Also, the current scale of removal can be balanced against the abundance of predators found across the country outside of areas where there is removal. There is, as yet, no detected impact of predator removal at a national scale. Most of our generalist predators, including the corvids and some birds of prey, are increasing in numbers or have stabilised after a period of increase. But we need to be vigilant.

The long-term impact of predator removal may become most apparent as the scale of removal increases, for example, where there are continuous blocks of land operating predator control as on the grouse moors of the North Pennines.

Many estates practising predator control collect bag data and submit it annually to the GWCT. Those that do not should be encouraged to do so, to demonstrate concern for predator control and good stewardship of the land they manage. This could provide local early indications of problems if predator removal is having a negative impact on species.

3.2 The Evidence

The evidence base is International and not just found in populations of ground-nesting birds in the UK. Predation issues are a major concern for ground-nesting wader birds across Europe.

Key Reference - Macdonald M.A. & Bolton M. (2008) Predation on wader nests in Europe. *Ibis* 150: 54-73

3.2.1 Removal experiments

GWCT Evidence

3.2.2 Salisbury Plain

The GWCT's Salisbury Plain Experiment was a large-scale trial that studied whether legal predation control in spring and summer could improve breeding success and population growth for wild grey partridge. Predation control was carried out on one study area, while a second similar area nearby acted as a comparison without predation control. After three years, predation control switched from the first area to the second. The predators targeted were fox, stoat, weasel, rat, carrion crow, magpie, jackdaw and rook. The birds were removed under the General Licence.

This experiment showed unambiguously that controlling predators allowed 75% greater production of young. Despite shooting, this improvement carried over into successive years, so that spring breeding numbers increased by 35% each year and were 2.6 times greater after three years of predation control. Autumn numbers, before shooting began, were 3.5 times greater after three years. Clearly, this set of common predators was having a substantial impact on the local partridge population and controlling them from March to September relieved much of the pressure.

Key reference - Tapper, S.C., Potts, G.R. & Brockless, M.H. (1996). The effect of an experimental reduction in predation pressure on the breeding success and population density of grey partridges *Perdix perdix. The Journal of Applied Ecology,* 33: 965.

3.2.3 The Upland Predation Experiment – The Otterburn Experiment

20 years later, the GWCT conducted a similar experiment on moorland in the north of England. The Upland Predation Experiment showed predation control led to benefits for breeding red grouse, but also curlew, lapwing, golden plover, black grouse, grey partridge and meadow pipit. With predation control, these wading birds were able to breed well enough for population growth, an important threshold that was not reached in the absence of predation control.

The effect on the curlew population was marked – in the absence of predation control, curlew numbers were dropping by 17% per year. When legal predation control was implemented, curlew numbers rose by 14% per year (after a lag period as the new chicks reached breeding age). We have calculated that the low

breeding success seen in this experiment on moors where predators were not controlled could lead to a drop in lapwing and golden plover numbers of 81%, and curlew of 47%, over ten years. This prediction has not yet been tested, but studies have shown higher curlew density on keepered moorland.

Key reference - Fletcher, K., Aebischer, N.J., Baines, D., Foster, R. & Hoodless, A.N. (2010). Changes in breeding success and abundance of ground-nesting moorland birds in relation to the experimental deployment of legal predator control. *Journal of Applied Ecology,* 47: 263-272).

3.2.4 GWCT's Corvid Removal Study

There is new scientific evidence that corvid removal does positively impact songbird populations locally. The GWCT is concerned that this might be overlooked and wants to highlight three recent studies. Previous national scale studies suggest that local effects have no impact on national population trends, with weak links between magpies and songbird populations. However, the new evidence strongly suggests that the national figures will mask local patterns. The evidence summarized below indicates that the ability to apply targeted corvid control at short notice can be beneficial, where breeding hedgerow nesting and probably other songbirds are exposed to breeding corvids.

In their recent comprehensive review Roos *et al.* (2018) state (in the abstract) that they found little evidence that predation limits populations of passerines but that they do limit waders. This, however, is not a full and balanced reflection of the results, and a key finding of the review, highly relevant to this call for evidence, is easily overlooked. Table 5, which refers specifically to experimental predator removal studies, shows songbirds increased in 40% of 20 studies following predator removal. For waders, it was similar, at 44% of 29 studies. The conclusion from this is that the science available prior to 2017 tells us that corvid removal can lead to an increase in songbird population size.

Since Roos et al. (2018) conducted their review (in 2016), the GWCT has published the results of a large field study over four years that looked specifically at the effect of corvid removal using, primarily, Larsen traps (Sage & Aebischer 2017). The study applied randomised corvid control treatments to one plot in each of 16 pairs of study plots and documented nest success in hedgerow nesting passerines, using fledged brood counts and occupancy modelling. Overall songbird productivity was increased in the removal plots by on average 10% over the four years and by, on average, 16% in the three study years when it didn't rain heavily throughout spring (supressing both songbird and corvid productivity). While both crows and magpies were removed from study plots, the ecology of these two birds suggests that magpie control using Larsen traps was probably the main cause of the improved songbird breeding success documented in the study. Control reduced but did not eliminate magpies or crows from any of the 16 study sites.

The third strand of evidence relates to a PhD study supervised by Exeter University and the GWCT and successfully defended in 2018 (Capstick 2018). The PhD examined factors that might cause variation in the effect of corvid predation on songbirds in a UK agricultural landscape. Three chapters are of specific relevance to this consultation:

- Chapter Two (paper in review): This review of the literature found that 25% of all reported songbird nest predation was attributed to corvids. Some songbird species were more susceptible than others, depending on their nesting biology and breeding season. Corvid removal can lead to increases in the breeding success of species especially vulnerable to predation.
- Chapter Four (paper in press): The study found that artificial nests (mimicking hedgerow farmland songbird nests) were more vulnerable to predation by magpies, inside magpie territories and at the peak of the magpie's breeding season.
- Chapter Five (paper in prep.): Site choice and success of songbirds in an agricultural environment were examined and indicated that songbirds may be actively avoiding nesting near magpie nests and, as a consequence, could be choosing suboptimal sites.

Key References

Capstick, L. A. (2018). *Variation in the effect of corvid predation on songbird populations.* Unpublished PhD thesis, University of Exeter.

Sage RB & Aebischer NJ (2017) Does best-practice crow Corvus corone and magpie *Pica pica* control on UK farmland improve nest success in hedgerow-nesting songbirds? A field experiment. *Wildlife Biology*. DOI: 10.2981/wlb.00375.

Roos S, Smart J, Gibbons, DW & Wilson JD (2018). A review of predation as a limiting factor for bird populations in mesopredator-rich landscapes: a case study of the UK. *Biological Reviews*. DOI: 10.1111/brv.12426.

3.3 Other manipulations

Of the replicated, randomised removal experiments represented by work on Salisbury Plain, Otterburn and the Corvid Study are at the top of a 'quality' research methodology scale. Large-scale manipulations over large areas and over time are the next quality down. The GWCT has conducted or overseen many such studies.

3.3.1 Loddington

This is the GWCT's first demonstration farm, set up in 1993. It represents 330ha of unexceptional land on heavy clay in Leicestershire. Between 1993 and 2001 we began a programme of management for wild game species and songbirds, which included habitat enhancement, winter feeding and legal, seasonal predator control using the General Licence to control corvids. In that time, we recovered songbird numbers to their 1960s levels. Also, in that time, a similar increase was not observed in national breeding bird data. Additionally, our wheat yields matched national and regional figures. The increase in bird numbers was not caused by a de-intensification of farming; in fact, the reverse was true.

However, songbird increase was not thought to be attributed to predator control alone. What role did habitat and feeding play in this increase? To answer this, we removed predator control between 2001 and 2006 whilst maintaining habitat improvements and feeding. Over this time, songbird numbers fell and continued to fall when the feeders were also removed between 2006 and 2010.

During this period, we collected data on nest survival. For selected species, but not all, survival rates increased during periods when predators were controlled compared to periods when they were not. e.g.:

	Keeper	Unkeepered	% change
Blackbird	25.7	8.9	+65
Songthrush	23.6	11.6	+50
Chaffinch	28.1	14.2	+50
Yellowhammer	32.3	16.9	+48

Key References:

White, P.J.C., Stoate, C., Szczur, J. & Norris, K. (2008). Investigating the effects of predator removal and habitat management on nest success and breeding population size of a farmland passerine: A case study. *Ibis,* 150: 178-190.

White, P.J.C., Stoate, C., Szczur, J. & Norris, K. (2014). Predator reduction with habitat management can improve songbird nest success. *Journal of Wildlife Management,* 78: 402-412.

Stoate, C., & Szczur, J. (2001). Could game management have a role in the conservation of farmland passerines? A case study from a Leicestershire Farm. *Bird Study,* 48: 292.

Stoate, C. & Szczur J. (2006). Potential influence of habitat and predation on local breeding success and population in Spotted Flycatchers *Muscicapa striata.* A short report. *Bird Study,* 53: 000-000.

3.3.2 Royston

Between 2002 and 2008 we ran another demonstration of best practice management for grey partridges on several farms across the chalk ridge between Baldock and Royston. The principles were the same as those applied on Salisbury Plain, but at Royston there was no switch of keepered and unkeepered plots. On the keepered area, grey partridge densities increased from 2.9 pairs per km^2 in spring to 18.4 pairs. On the adjacent unkeepered area spring densities increased from 1.3 to 4.2 pairs. Keepered and unkeepered plots were adjacent so there was no barrier between the management areas. Again, corvids were controlled under the General Licence.

Key Reference: Sotherton, N.W., Aebischer, N.J. & Ewald, J.A. (2014). Research into action: grey partridge conservation as a case study. *Journal of Applied Ecology,* 51: 1-5.

3.3.3 Arundel, Sussex

On private land in West Sussex, an estate owner has taken the management package devised by the GWCT to recover grey partridge numbers and implemented it on his farm The package includes predator control including corvid removal under the General Licence. The farm is one where the GWCT has been counting partridges since 1968 and has done so every year since then. At the start, grey partridge spring densities were high (up to 40 pairs per km^2), but by 2003 numbers had fallen to three birds! At this point the tenancy ended, the land came back in hand and the management began.

Population recovery was spectacular, increasing to nearly 90 pairs across the farm (or from 6.3 pairs per km^2 in 2003 to 19.1 pairs in 2015). On other parts of the study area without this management, numbers varied between 0.8 and 2.4 pairs per km^2. Autumn densities at Arundel increased from 1.1 to 140.6 birds per km^2. Songbird numbers have also increased, but this work has not been reported in the scientific journals. But it does represent what is happening on many private estates aided by the licensed control of corvids.

Key Reference: Aebischer, N.J., Ewald, J.A., & Kingdon, N.G. (2018). Working towards the recovery of a declining quarry species: the grey partridge in the UK. In: Baxter, GS, Finch, NA & Murray, PJ (eds) *Advances in Conservation Through Sustainable Use of Wildlife:* 55-62. Wildlife Science Unit, University of Queensland, Gatton, Australia.

3.4 Surveys comparing areas with and without predator control and subsequent monitoring

3.4.1 Lapwings in the Avon Valley, Hampshire

GWCT work here involves finding lapwing nests and following their fate. Then we try to attribute losses to particular causes. Between 2008 and 2012, from a sample of 296 nests monitored, 158 failed (53%). Among these failures 129 (82%) were lost to predation. By placing temperature loggers in nests during incubation, we discovered that 41% of nests were lost during the hours of daylight. From this, we assume the nest was raided by day-active as opposed to nocturnal predators (fox, badger). Day-active predators include the corvids. We also calculate crow densities in the valley and have found a powerful negative correlation between daily survival rates of lapwing and carrion crow density. At crow densities of 0.1 per hectare, daily lapwing survival rates were 85-90%. At crow densities of 0.55 per ha, survival rates were 55%. This work is ongoing and not yet published.

3.5 Curlew breeding success in relation to grouse moor proximity: estimating abundance and breeding success using behavioural data

Interim summary report

This summary paper outlines the potential fate of one of the UK's most threatened bird species if corvids are not legally controlled.

The breeding population of Eurasian curlew (hereafter 'curlew') is declining across almost all its range, with estimates suggesting a 20 to 30% decline in the last 15 years. For this reason, the IUCN classifies curlew as 'Globally Near Threatened' on its Red List of Threatened Species. The UK population represents about a quarter of the global breeding population, but here it is estimated that the breeding population halved in the last 25 years. Accordingly, it is considered the bird of greatest conservation concern, with high UK decline rates having a greater adverse impact on the global population than those of any other country.

Poor breeding success, often attributable to predation, typically by foxes, stoats, crows and gulls, is a mechanism for decline. In Europe over half of published studies quote less than the 0.5-0.6 fledglings per pair per year required to offset adult mortality and to maintain a stable population. Declines appear less in some upland parts of northern England and Scotland where driven grouse shooting is a major land use and both habitat, and generalist predators are managed. This link between grouse moor management and sustained numbers of breeding curlew was established by the GWCT's Upland Predation Experiment at Otterburn in northern England (2000-08) (see above). Here predator control led to a three-fold increase in the breeding success of curlew and other waders and annual increases in breeding numbers.

It is evident that managers of driven grouse moors have a pivotal role in conserving curlew in the UK and hence globally, but this link, whilst weakly acknowledged by the RSPB and statutory conservation bodies, is also massively played down by them. To that end, in 2016 the GWCT started a three-year project to quantify curlew breeding success on or adjacent to a range of keepered and non-keepered moorland edges to determine whether results from the Otterburn experiment were representative of those from wider moorland in the UK.

Study sites were paired, with one site on the fringes of moorland managed for driven red grouse shooting, and thereby receiving active predator management, the other on equivalent habitat type without adjacent grouse shooting and keepering. 18 paired sites were selected across most upland regions in the UK, including North Wales (Berwyn), northern England (Bowland, Yorkshire Dales, North Pennines, North York Moors and Northumberland), the Scottish Borders (Lammermuirs, Southern Uplands) and the Scottish Highlands (Perthshire, Strathspey and Morayshire). Pairs of sites were each surveyed in one breeding season during the three-year period (2016-18). Sites were sufficiently large (approx. 1.5-4.0 km^2) to yield a breeding success estimate based on at least 10 pairs of curlews.

To produce estimates of the number of breeding pairs of curlew and their breeding success, each site was surveyed five times spread between mid-April and early July. Curlew were classed as having chicks if they alarm called vociferously and persistently. Conversely, adults lacking such behaviour and readily flying off when disturbed were classed as not having chicks. These parameters were also recorded for other waders, mainly golden plover and lapwing, but also redshank, snipe, oystercatcher, ringed plover and greenshank.

On unkeepered plots, curlew pairs were approximately half as numerous on keepered plots. Expression of aggressive behaviour by adult breeding curlew and the time period in weeks over which this behaviour was exhibited suggest that the proportion of curlew pairs fledging one or more chicks was almost four times higher on grouse moor fringes (0.67) than away from grouse moor fringes (0.17). This difference was consistent between regions and years and, of the 18 paired sites, breeding success was higher amongst the keepered sites at 17 of the pairs of sites and similar to the unkeepered site at only one of the pairs. At no pair of sites was breeding success higher where predators were not managed. Assuming curlew need to rear an average of 0.6 chicks per pair to off-set adult mortality and maintain stable numbers, then this was achieved at a minimum of 14 of the 18 (78%) keepered sites, but at none of the 18 unkeepered sites. These

rates assume that only one chick was reared per pair, but curlew can successfully rear up to four chicks, and these provisional rates will be corrected upwards using estimates of brood size at fledging during final analyses.

By looking at curlew behaviour in relation to the timing of each of the five surveys at each site, the data suggest that greatest losses occur during incubation and that an index of carrion crow abundance was negatively associated with breeding success. This suggests that clutch predation by carrion crows could be the primary cause of poor breeding, especially at sites where corvids are not routinely controlled. Breeding success may also vary between habitat types, but provisional analyses suggest that whilst sites overall differed in habitat, those within each pair of sites did not. Hence, differences in curlew breeding success in relation to corvid abundance were consistent across habitats and regions of the UK. Final analyses will include patterns of abundance and breeding success of the other wader species. To date, these reflect those of curlew, with higher numbers and better breeding success on sites where predators are managed by gamekeepers.

These results closely support those from the ten-year experiment at Otterburn, suggesting that those findings are representative of what is happening across the wider UK uplands. It is now 11 years since the Otterburn study was completed. Since then, the Ministry of Defence's Training Area at Otterburn has received no systematic predator control. Re-surveys of ground-nesting birds began last spring and predictably showed not only markedly fewer curlew, golden plover and lapwing – all species that flourished on the keepered plots during the experiment – but the local extinction of black grouse and grey partridge. Surveys are being completed this spring and results will be reported this autumn.

In conclusion, expanding predator management, particularly of corvids, currently done routinely on grouse moors, to peripheral unkeepered areas is a practical step that could quickly help stem the current rapid decline of curlew, other waders and ground-nesting birds in general in the uplands and marginal farmlands of the UK. This should be included as a funded component of agri-environment schemes where there are qualifying numbers of ground-nesting birds.

4. Problems with the new General Licences and simplified Individual licences

New licences for the lethal control of corvids to conserve flora and fauna have yet to be published, so our comments are based on the content of GL26 and GL31, with the assumption that many of the conditions (which, in our view, are unworkable and impractical) imposed in these new licences would likely also be in the General Licences for the conservation of flora and fauna. It is also based on our experience of applying for and receiving individual licences (under the new system) for the control of corvids to conserve wild flora and fauna.

4.1 New General Licences – GL26

Previous GLs were five pages long. GL26 is 11 pages long, and users of the licence must comply with supporting document GU01, 'Standard licence conditions for trapping wild birds using decoys under a Natural England Licence'. Presumably NE actually means document GL33. GU01 is the document 'Wildlife Management Advice Note: Legal measures to resolve conflict with wild birds'. This is obviously very confusing for the licence user. It is unclear if Larsen mate traps can be used. On the licence it states traps that can be used are Larsen traps and multi-catch crow traps, whilst GL33 states trap types 'commonly used' under licence are Larsen traps and multi-catch traps. Does this mean Larsen mate traps can be used? SNH includes clear definitions of the different types of traps that can be used on the Scottish General Licences.

4.2 New conditions

Conditions within these licences include lethal control only being used as a last resort. Reasonable endeavours must have been made to resolve the problem/threat by non-lethal means, unless 'impractical, without effect or disproportionate'. These measures must also continue during licence use. It is not clear

what definitions of 'reasonable', 'impractical' or 'disproportionate', will apply. This puts licence users in a precarious legal position. Continuing with non-lethal measures whilst lethal control is being undertaken could, in practice, be impossible. For example, how does a lone operator scare pigeons or crows whilst simultaneously undertaking lethal control?

The requirement to undertake or have tried non-lethal measures (e.g. scaring devices) whilst controlling crows to protect ground-nesting birds (a condition on the individual licences and based on the conditions of GL26 – which will probably be a blueprint for other GLs – a likely condition on the licences for the control of crows, magpies and other corvids to protect flora and fauna) as well as being impractical, could be counter-productive and lead to negative conservation outcomes. While non-lethal measures, e.g. scaring, have a role in preventing pigeon damage to crops, none of these methods are effective or appropriate where corvid control for the protection of ground-nesting birds is the objective. Scaring (audible or visual) is not effective when it is impossible to know the exact whereabouts of the nest you wish to protect: where should you set about scaring your crow from? There is a serious risk that you can scare the conserved bird as well, perhaps leading to nest desertion, or increased vulnerability to other predators. It is clear that where nests are dispersed, scaring has no place in reducing corvid predation for conservation reasons. Habitat improvement is clearly important, and one cannot expect any species to thrive in a substandard environment, but even with enhanced habitat aimed at supporting the entire life cycle of target birds, nest predation by corvids is often a serious issue. The review of the scientific evidence base for the value of predation control in the conservation of wild birds (section 3) demonstrates how lethal predation control (including control undertaken within the previous General Licensing system) can be very effective.

The new licence requires that the users of the licence, "*Must be able to show, if asked by an officer of Natural England or the Police: (i) what type of livestock any action under this licence is protecting; (ii) what lawful methods have been, and are being, taken to prevent predation of such livestock by carrion crow or why the lawful methods have they have not been taken; (iii) what measures have been and are being taken to minimise losses to that livestock from other predators and causes; and (iv) why the threat of predation from carrion crows is sufficiently serious to merit action under this licence*." These requirements are all new, onerous and arguably impossible requirements. They also put a significant burden of proof on the licence user, which is leading to serious concern and confusion amongst practitioners.

The new licences cannot be used to shoot crows in protected sites (i.e. SSSI, SPA, RAMSAR, etc), or within 300 metres of them. NE states that: 'People who have a consent underpinned by a Habitats Regulation Assessment (HRA) to control certain wild bird species on Sites of Special Scientific Interest (SSSIs) can still continue to do so. If people are unsure if their consent is supported by an HRA, or they need to take action in a SSSI which is not covered by their existing consent, they should talk to their usual contact in the local Natural England office'. The difficulty here is that many landowners, farmers and gamekeepers do not know if NE has undertaken an HRA over the land on which they operate and will likely need to take action at short notice. This is leading to significant confusion amongst practitioners and consequently negatively impacting on vulnerable livestock, crops and wild birds.

GL26 states that the licence can be used only as a 'last resort to prevent serious damage'. There are definitions of what NE considers to be serious damage. With respect to released pheasants, the licence states that 'the loss of some released gamebirds to crow predation is normal 'business risk' and then states that if crow predation were to reduce or threaten to reduce the numbers of birds recovered to below 35% then that would constitute serious damage. It is impossible for a shoot manager to predict in summer, when immediate action is required to protect released pheasants, if end of season returns six months later would be lower than 35%. These conditions need significant re-working. Based on the conditions in GL26 and GL33, it would seem likely that in licences to control corvids to protect flora and fauna, there would be a requirement to define 'serious damage'. We have no idea how NE proposes to define 'serious damage' in the context of the conservation of wild birds. Also, using licences only as a 'last resort' could be too late for

local populations of vulnerable nesting birds, and land managers should be able to undertake lethal control as part of a planned, annual conservation management strategy.

4.3 Individual Licences – Application to control certain wild bird species (19-02)

We have received many calls and enquiries from our members about the Individual Licensing system application process. Several applicants have not received licences two weeks after application, which is leading to direct negative conservation impacts on the ground. One of the problems with the application form (once individuals have been able to download it – the form was in a format that many applicants were not able to open) is that it contains a lot of information that is not relevant for that particular licence (i.e. it contains very similar text and conditions to the other individual licence categories designed for other situations and activities). This has led to significant confusion amongst applicants. For example, on 19-02, there is a requirement to have undertaken an array of non-lethal measures that, for the purposes of this particular licence, are not relevant or could even be counterproductive. On the application form there is a requirement to provide a grid reference of where the control will take place. Yet, on the licence itself, it states 'Area valid in: all counties of England (landward of the mean low water mark)'. What does NE mean?

There is requirement that authorised operators must be over 18 unless they have written authorisation from Natural England. Many professional trainee gamekeepers are under 18, and shooting problem crows will be one of the jobs they are likely to be tasked with. This is an unnecessary bureaucratic burden.

It is the GWCT's view that the issue of General Licences by the UK has been the most satisfactory solution to perennial problems over many years that are commonplace but also dispersed, seasonally brief, and difficult to predict; and where local and temporal circumstances affect the success of either non-lethal or lethal control measures.

5. Member responses

- We received 450 responses (over 90,000 words received) in 5 days
- Key issues are impact on songbirds (mentioned by 51% - almost a third of whom had observed the damage caused) and crop protection (49% mentioned). Almost 20% of respondents had observed crop damage.
- 22% were concerned about the impact on livestock, with half of these having witnessed it first-hand. This was predominantly corvids attacking sheep and lambs.
- One in five responses mentions the impact on wading birds, especially red-listed birds such as lapwing (mentioned by 14%) and curlew (mentioned by 10%).
- 16% of respondents mentioned gamebird conservation

We were impressed with the effort made by so many respondents to articulate and share their thoughts and observations. We are particularly concerned about the comments made by those that feel disillusioned because it can take years to inspire and train those willing to undertake conservation on their land but only weeks for them to disengage.

The following remarks sent to us we felt were of particular note:

The need for an injection of realism:

- The issues of 'Predation' should no longer be 'brushed under the carpet'. The 'philosophical' objection by some conservation organisations to the killing of any birds is causing untold damage to songbird populations

- Research has proven that legal predator control is vital to helping endangered & rare species and this has been withdrawn at the worst possible time.
- Overall my biggest wish is that the Government takes its advice on wildlife conservation and management from those who have the knowledge experience and wisdom to do the right thing for nature.
- Prior to the revocation we found the general licence to be a perfectly workable document enabling us to target and control the relevant species in order to protect ground nesting birds and crops.
- On our estate we have wetlands, rivers, arable crops and a vast array of ground nesting birds some of which nest within SSSI's the general license covered control across the whole estate and worked perfectly well. Since the revocation it has been near impossible to carry out the necessary protection of the species that many in various stewardship schemes are paid to protect. There are no viable alternatives available to deal with predation in these vulnerable species and the general license was imperative.
- It seems the revocation of these licenses is the result of a handful of people campaigning from an emotional viewpoint rather than from scientific research.

A sense that further conservation efforts are pointless:

- Canada geese are also a problem at the moment. I have chased them off on several occasions this spring but they come back in the evening and now refuse to fly away. Normally the answer would be to shoot 1 or 2 in full view of the rest then they don't come back for a long time that has always worked in the past. The problem I have is that we have planted areas or nectar rich plants nearby for the benefit of endangered insects and the geese have grazed it off already. No point replanting as they will eat it again. What a waste of time and effort and no help for insects.
- This moor is managed for wildlife and conservation grazing. The control of Crows and Magpies etc is vital for the moor to have any reasonable success rearing ground nesting birds and song birds. Ten years hard and careful work has gone into this project. This decision can see all this work disappear in one season. Why have Natural England funded us to do this work then destroyed it overnight.

Compromising government funded conservation:

- The government pay grants to the farmers for these margins but it's too little benefit where control of corvids in the spring does not occur as small birds and our wonderful curlew and lapwings fail to rear their chicks to adulthood.
- Having fed song birds all winter with our supplementary feeding to Winter Bird Cover [AB9] under our CSS scheme I have now had to withdraw my 2 Larsen traps [magpies] & crow trap just as we are approaching the peak nesting/hatching of our numerous songbirds. This leaves these predators [magpies & crows] with a free run at killing off our hard work & wasting Government funds ploughed into Countryside Stewardship schemes similar to ours. In my case £16 000 per annum of DEFRA's money It makes little sense.
- Within our Mid Tier agreement with Natural England we have contracted to manage hedges plant wild bird cover and supplementary feed during the hungry gap. These actions will be a waste of taxpayers money unless we can control those species that predate the very birds we struggle to promote
- It leaves me speechless as to how and why public money is spent on protecting and improving habitats for such species yet Natural England take away the fundamental element in place to protect such species from predation.

The loss of a vital conservation tool:

- I am the owner/manager of a small nature reserve in East Sussex just 25 acres but a biodiversity hot-spot where over 50 bird species with proven breeding status were recorded during the last bird atlas survey. Breeding success has been dependent on effective control of corvids principally

crows and magpies using Larsen traps. With over 60 years conservation experience I have found no other method as effective or practical. With the explosion in jackdaw numbers all my nest-boxes put up specifically for barn owls, kestrels tawny owls mandarin ducks and stock doves are routinely filled with jackdaws' nests. Only by shooting these birds can the other species breed -removing jackdaws' nests alone is futile as they are immediately rebuilt.

- We find ourselves in a position where we are unable to protect red listed BAP species from predation on our farm at the most critical time of year.

Observed impact on wildlife:

- Yesterday I watched as 3 crows robbed and destroyed a skylark's nest despite all I tried to do to put them off. I believe that this is the last one of the many Skylarks that nested on our village common adjacent to the River Parrett SSSI that have been wiped out due to lack of predator control.
- The one year we were unable to larsen trap and shoot those breeding successes showed a marked decline
- I have immediately lost the nests of 2 pairs of late nesting lapwings because I couldn't kill the carrion crows near the nest sites. The turtle doves are about to arrive and my inability to kill the crows and magpies near the nest sites wherever they turn out to be will be catastrophic as I usually have 3 to 5 pairs here and maintain thickets and high hedges to help them and carry out magpie and carrion crow control.

Observed impact on livestock:

- As a farmer I find it most infuriating that this was introduced during the hill lambing period crows are devastating at lambing time new born lambs are attacked before they can get to their feet. To see a lamb that has lost its eyes before its navel is dry is shocking.
- As for my poor lambs we have had the eyes pecked out of 16 i have tried using bangers but they soon learn it's not a threat. Please, Please help.
- crows / rooks / magpies and jackdaws congregating and eating / fouling stored animal feed on farms which would compromise the Farm Assured status thus endangering public health down the chain.

The lack of practicality of the alternatives to lethal control:

- The alternatives are simply not practical with relation to conservation efforts. How can we be expected to scare birds over 1000 acres when we cannot identify every nesting site? What would the effect of scaring be on nesting success with the associated disturbance?
- Our farm is entirely given over to wet grassland for breeding waders. I do not have the time to shoot gulls and corvids myself. Without the general licence I cannot get others to do this for me. We are already seeing an increase in corvids persecuting the waders - particularly Lapwing. We also have a growing colony of Canada Geese which are depriving the waders of breeding territory and will most likely trample nests. Non lethal methods are not satisfactory; we have tried rockets but all this seems to do is scare the waders we are trying to protect
- We have tried non lethal methods but for a variety of reasons they have not been effective 1) Visual deterrents have limited effect as birds in this area are used to humans 2) Crow bangers do not deter the birds but seriously upset our neighbours 3) Netting has been impractical around the buildings 4) We experience significant "transient encroachment" of corvids and feral pigeons from near by urban areas which require a swift and decisive response.
- To suggest there are non lethal ways of keeping predators away from nests is naive in the extreme as if anyone has the time to do their full time job and stand around multiple sites on their farm at the same time.
- The practicalities of using non lethal methods to deter pests and predators over the land we manage simply do not work and this is not said through lack of trying. The only alternative is lethal control of which we have proven success.

- There is no alternative to lethal control. Scaring lasts only very briefly.

Concern about imminent damage:

- There is a 15 acre woodland at the back of my house and the owner allows me to manage it – flora and fauna. Apart from grey squirrels I only cull carrion crows and magpies as I have witnessed them raiding songbird nests and believe it is vital that we give our birds every chance to breed successfully. Since the revocation I am now visited several times each day by carrion crow and magpies. Once the breeding season starts no songbird nest will be safe. Normally I would have culled them by now (about 4-6 each Spring) but they now walk around the grounds and my garden with impunity.
- In the last few years the number of rooks, magpies and crows has massively increased and buzzards are new to the area. Coupled with an explosion of badgers which we cannot control the local wildlife has been decimated. Ground nesting birds especially have been hit hard by all these predators. The balance of nature is being upset by too great a number of species at the top of the food chain. If control and management is not undertaken we will lose all our smaller birds and mammals. The hedgehog is almost wiped out because of the badger population.
- Magpies and corvids need to be trapped and controlled as all the good we have been doing over the years will be undone very quickly and populations of small farmland birds will start to decline again.
- It is a great frustration to know that I can no longer legally control the numbers of Magpies and to know that as a result we are unlikely to enjoy lots of small birds in our garden. To protect small bird populations I urge the relevant authorities to issue general licences to allow the control of predator species like Magpies ASAP.
- The ground that I Larsen Trap corvids and shoot corvids on has cuckoos, nightingales, skylarks, oyster catches (nesting on stony fields) reed warblers, wild ducks wagtails the list goes on. These are all very vulnerable to corvid predation and the control of these is absolutely essential.

Observation of benefits:

- Controlling crows and gulls in the past few years has allowed some lapwing and curlew chicks to fledge at last.
- I own a small farm and shoot in Oxfordshire. Most of the farm in in the CSS to encourage conservation of birds plants and insects. I am also a member of a group of Farmers big and small along the XXX Brook that work together to ensure conservation efforts along the valley is pooled to maximum benefit. Our Scheme is coordinated by the XXXX Wildlife Trust. The purpose of the two schemes above is to preserve and restore the habitats for many of our farmland birds which are under severe pressure. I have been controlling the Carrion Crows and Magpies on the farm for 10 years now and it really makes a difference. In our big farmland bird count this year there were over 22 species of birds spotted in the 30 min period. If it becomes illegal for us to control the Carrion Crows and Magpies that spend nearly all their time at this time of year walking along to top of hedge rows pulling out the nest with eggs and young what is the point of putting all the other effort in.
- The benefits of the revoked licenses allow control of corvids that in our case lead to: 1. Our Black Grouse population to thrive 2. Lapwing to return to the farm and breed after an absence of 20+ years 3. Curlew to successfully breed and flourish - we have over 8 pairs and recently found a nest with 4 eggs The withdrawal of the license threatens the above species as corvids will take anything they can. We will never know the true damage caused.
- Since we have had a policy of controlling magpies and crows over many years we have seen an increase in the breeding success of songbirds.

Observed crop damage:

- The revoked general licenses meant that pigeons damaged pea crops and crows ate my free range hen and duck eggs causing significant financial damage.
- We cannot undertake crop protection as previously. Rape has been demolished. It has got gas guns in drums and flags but the damage is up to around 40% birds are eating and flying from the woods in their thousands.
- We have a 300 acre mixed farm. With nesting plover and English Partridge the crows are just waiting for the chicks to hatch. We have 60 acres of sown beans the rooks have pulled up half we use scarecrows but very time consuming as you have to move them twice a day. If we get any crop at all the Pigeons will be on to those.
- We have a pea crop just emerging and flowering oilseed rape still being attacked by pigeon flocks. We need to protect both crops and shooting is the most effective way. Although we have flags and gas guns out on the peas we are still seeing pigeons feeding on the emerging seedlings. If we can prevent seedling damage we'll get a crop if we can't we won't and that is money we can ill afford to lose. Same with the oilseed rape we have spent most of the money on this crop now we don't want to see it all go to waste by losing part of a crop now.

Dissatisfaction with the decision to withdraw the general Licences

- As a keeper with over 40 years full time experience dedicated to wildlife diversity and conservation, I find this latest decision re general licences to be madness verging on insanity
- Full consultation should have been conducted involving all bodies involved in agriculture and our countryside.
- I am so angry and bitter about this gross betrayal that next year which will mark the end of my current agreement will be my last. I see no point in having anything to do with Natural England anymore. The sudden loss of the general licence has had a profound impact on me as I now feel I do not have full ownership of my own farm and my ability to carry out my 29th year of stewardship obligations. I take these responsibilities very seriously.
- I feel very bitter that Natural England is paying me to carry out conservation measures but has now said it doesn't care about rare species after all.
- The vast majority of volunteers who use their own resources are extremely law abiding and know only too well that a breach of the W&CA will lead to the immediate and permanent loss of their firearms licence. Now the way this has been handled and uncertainty that led to some key people potentially breaking the law as they had not been informed or had good time to comply has led to key unpaid volunteers permanently 'walking away' never to return.

We have submitted a supporting document 'GWCT Annex 1. Member responses to General Licence evidence review'