



Game & Wildlife CONSERVATION TRUST *Cymru • Wales*

GWCT Wales response to NRW's approach to regulating the shooting and trapping of wild birds and the destruction of eggs and nests: Consultation Document 2021

Respondent information

Game & Wildlife Conservation Trust Wales,

The Maltings, East Tyndall Street, Cardiff CF24 5EA

Correspondence regarding this consultation response: mgoodall@gwct.org.uk

Our specific interests in this consultation are as:

Academic/scientific/research
Animal Welfare
Farming - arable
Farming - livestock
Fishery or fish stock management
Gamebirds
Landowner/occupier/manager
Pest control
Wildfowling
Wildlife conservation

Who we are

This submission has been produced by the Game & Wildlife Conservation Trust in Wales (GWCT), a research and education charity that has had over 1,000 scientific papers published in peer-reviewed journals over the past 80 years, more than 100 of which were on issues relating to predation and farmland and moorland birds. On the basis of our scientific expertise, we regularly provide advice to statutory bodies as well as providing practical advice to farmers and landowners 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.

Much of our research is undertaken in collaboration with other institutions and organisations, including Cardiff University, the British Trust for Ornithology, the Centre for Ecology and Hydrology, and the RSPB.

Confidentiality and Data Protection

1. Would you like your response to be kept confidential? (Required)

1.1. No

1.2. If you answered Yes to this question please give your reasons

NA

About you

2. What is your name? (Required)

Matthew Goodall

3. What is your contact e-mail or postal address? (Required)

mgoodall@gwct.org.uk

4. Are you responding as an individual or on behalf of an organisation? (Required)

4.1. Organisation

4.2. If you are responding on behalf of an organisation, please tell us which one:

Game and Wildlife Conservation Trust

5. What is the main reason for your interest in the shooting and trapping of wild birds in Wales? (Please tick the one that best applies to you): (Required)

Academic/scientific/research✓

Animal welfare✓

Falconry

Farming – arable✓

Farming – livestock✓

Fishery or fish stock management✓

Gamebirds✓

Landowner/occupier/manager✓

Pest control✓

Recreation

Wildfowling✓
Wildlife conservation✓

Other. If other, please specify:

6. Your location (Required)

The Maltings, East Tyndall Street, Cardiff CF24 5EA

6.1. If you are based in the UK, please tell us the first part of your postcode (for example LL57)

CF24

6.2.If you are based outside the UK, please tell us which country

N/A

Principles for deciding when general licences are appropriate

7. Do you agree with the principles we are proposing to apply for deciding whether to grant a general licence?

7.1. No

7.2. Please give your reasons

Whilst it is clearly important that the governance of granting general licences should be transparent and follow a set of 'principles' we believe that the proposed methodology and decision making is too rigid and may impede the correct decision being made or the correct outcome being achieved.

Within the consultation and regarding the principles NRW states 'Unless all of these principles are satisfied, we do not consider it appropriate to allow the killing or taking of a species under general licence'. Whilst this concept has merit, we believe that including wording such as 'unless there are good reasons' whereby increased flexibility is added into the decision making and the correct decision can be reached based on evidence and a common-sense approach.

Our main concern with these principles is Principle 5 which states 'Allowing lethal control of a 'target' species under a general licence will not risk putting it into an unfavourable conservation status' and specifically Principle 5 part (i) which states 'We propose that a species will only satisfy this principle for potential inclusion on a general licence if it is 'green listed' in the most recently published BoCC assessment for Wales'.

We feel it is important to point out that the statement under 5(i) "If a species is 'amber listed' or 'red listed', it means that on the basis of available evidence it is undergoing significant long-term decline in breeding population or breeding range" is wrong, because European importance; rarity; localisation and international importance are also criteria. Hence non-declining species may be red-listed if they are of global importance, or amber-listed if they are of European importance, occur in internationally important numbers, have a highly localised distribution or are important to the wider UK.

We find Principle 5 potentially dangerous in terms of species conservation. Red, amber and green categorisation is based mainly on relative measures of population (how much it has either increased or declined in abundance or range from a previous point and international importance); except for rare species, it is not a measure of absolute population size or an assessment of how close to extinction a

species might be. It therefore has the potential to create perverse outcomes. For instance, a species which has moved from green to amber may still be relatively abundant if the abundance from which it has declined was historically high. Equally, a species which has recovered from amber to green owing to predation control could go back to amber when consent for that control was withdrawn. Additionally, refusal to give consent to protect green-listed species from predation, when the latter has been shown to have a population-level impact, could result in the species declining to amber.

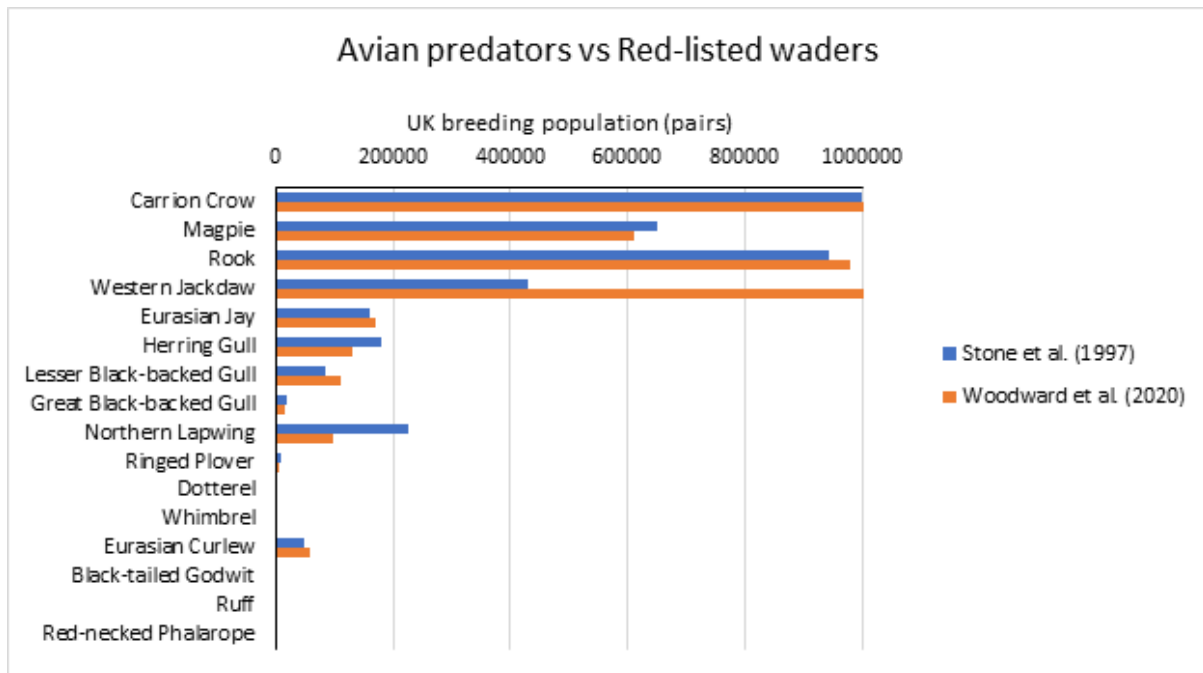
There is no evidence to suggest inclusion of a target species on a general licence can cause a decline at a national scale. Predation control undertaken under the general licences is short-term, targeted and localised to reduce predation pressure (not eradicate predation pressure) at a crucial time of year for prey species. It can be argued that if with the same effort you can annually take the same number of a particular species for many consecutive years, you would be doing so sustainably, i.e. your control would not be impacting the wider population. Furthermore, outside Wales, where intensity of control is arguably higher, there has been no detrimental impact to the main corvid species taken under licence: carrion crow has increased by 138% in 51 years in England and magpie has increased by 105% in 51 years.

To reiterate, there is no evidence to tie changes in population size to control under the general licence in any UK country. The factors affecting population size are much more complex, including variables such as habitat change, type and intensity of agriculture, proximity and scale of human settlements and climate change to name a few.

Furthermore, and perhaps most importantly, we believe that NRW is wrong to use the conservation status relating to BoCC in Wales as a guide to determine whether species should be included as 'target' species in the general or indeed specific licences. It is too coarse a categorisation, because that species' abundance needs to be contextualised relative to the species we are looking to conserve. We believe a better barometer to determine whether a species could be controlled under a general licence would be to compare its categorisation under the IUCN 'risk of extinction' list with that of the species to be conserved. If a species has recently declined from historically very high abundance, then even with a recent decline, it is likely to still be abundant and have a low extinction risk. We believe that this is the case for magpie in Wales, whose abundance has declined by 43% in a recent 23-year period in Wales; but in the context of a 97% increase in a 51-year period across the UK (we do not have access to the specific historic data for Wales during the same period). By contrast, the abundance of ground-nesting species needing protection from predators, e.g. red-listed waders, are much less abundant and at higher risk of extinction.

The precautionary principle should prioritise giving a greater level of protection to species that are nearer to extinction than to those that are not, even though populations of both species may be declining at a similar rate (which is one of the issues that determines whether a species is red-, amber- or green-listed).

To illustrate, below, we present data on the population sizes of breeding groundnesting waders in the UK compared with those of avian nest predators (but excluding raptors). The combined 'weight' of avian nest predator populations is many times greater than that of the waders, albeit at a UK scale.



8. Do you think there are other principles or tests we should apply before deciding whether to grant a general licence?

8.1. Yes

8.2. Please give your reasons

As covered above, we believe that the Welsh BoCC status may not be the most appropriate method for determining target species inclusion and instead suggest that the IUCN 'risk of extinction' categorisation may be more appropriate.

Although we do not agree with strict, rigid principles; we think that the impact of not issuing a licence should be given equal consideration to the impact of issuing a licence. Similarly, we think that the impact of not including a target species on a licence should be given equal consideration to the impact of said species inclusion. For example, the cost to prey species, the cost to public health and the cost to farmers' livelihoods should be carefully considered when the exclusion of a particular species from a licence would be detrimental, especially when there is a lack of evidence to support the exclusion of said species from the licences being beneficial to its conservation status but evidence to show that it is a recognized predator of other species of poor conservation status.

Target species on general licences

9. Do you think that magpie is suitable for inclusion on general licences in Wales in light of evidence of decline in their population in Wales?

9.1. Yes

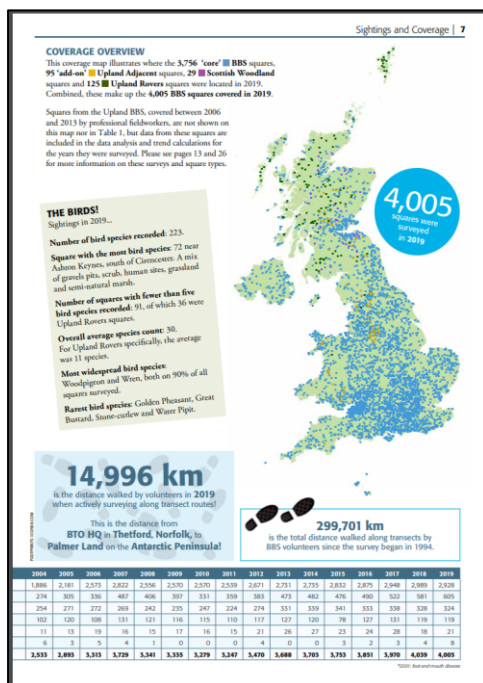
9.2. Please give your reasons

We believe that, although the population has declined recently in Wales, this decline should be contextualised with a historical increase across the UK. We suspect the UK-wide increase in magpie

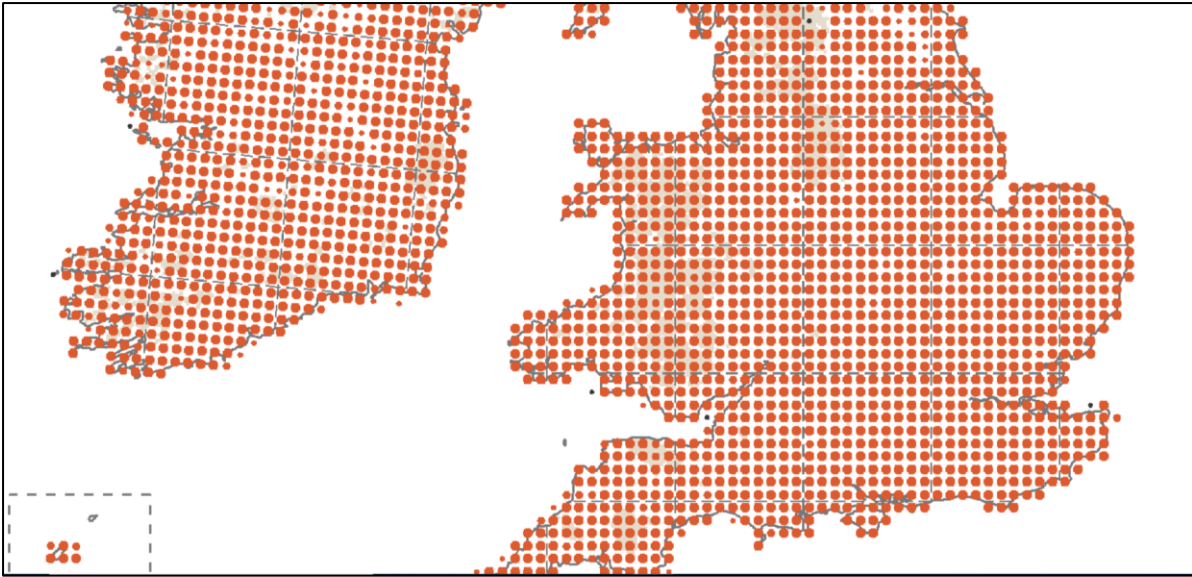
from 1967 is relevant to Wales to some degree, but we currently do not have access to data from Wales during the same period.

Furthermore, please refer to the argument above for question 7 relating to high predator abundance and BoCC status and how this may not be the most appropriate method for determining whether a species should be controlled under the general licences. We suggest that the IUCN 'risk of extinction' categorisation may be more appropriate. We would argue that when there are smaller, more threatened, and declining prey populations, which are inherently closer to extinction due to less individuals within that population, it is of greater importance to offer protection to those prey species instead of withdrawing their protection by removing the option of managing the predatory species.

Whilst we recognise that a minimum sample size of 178 plots is large enough to be statistically robust enough to reliably inform a trend for magpie abundance, we are concerned with the range and coverage of the available data (see the BTO map included below). Most sites are in the north, east and south, leaving central and western Wales relatively sparsely sampled. The 2007-11 breeding atlas shows that there is some mismatch with the Welsh distribution of magpie, which is relatively common in the south-west peninsula for instance. There is therefore potential for bias, with BBS trend overestimating decline if magpies in south-west and central Wales are doing well.



Page 7 of the Breeding Bird Survey 2019 published by BTO, JNCC and RSPB found [here](#)



Picture of the BTO mapstore web page showing map of magpie breeding distribution 2007 - I found [here](#)

Additionally, we are concerned that a perceived trend in changed habitat usage has seen magpie more closely associated with human settlements than in the past. This is reflected in the RSPB Big Garden Birdwatch results for Wales where magpie sightings have increased in recent years. Whilst the shift towards human settlements may be partly responsible for a perceived decline from BBS sample areas, we have no substantial evidence to base this assumption on. We are however concerned how this dynamic affects predator-prey relationships in the wider countryside.

Whilst strongly reiterating that there is no evidence to suggest that local control of a target species can impact a national population. We question whether there is a potential evidence gap and opportunity for research with regards to how local control could potentially skew BBS data when a) a data set is relatively small and b) does not cover the representative area adequately. If in theory, a percentage of BBS plots occupied the same area where control of a target species takes place, and that control had begun during the time frame in question or increased intensity during the time frame in question, could local control skew a BBS data set if that data set was relatively small?

Please note we have started to collate information to look into the above and better understand this potential concept, but we will not be able to produce the full research and analysis needed within the time frame of the consultation. However, we have found from a quickly coordinated survey, that magpie control (n=218) potentially takes place on approximately 30% of BBS plots (n= 333). Given that the BBS plots used for the sample (n=333) is greater than the minimum sample for the magpie population estimate (n=178), the overlap may be greater. In addition, 51% of survey respondents had begun magpie control in their location within the last 15 years and 69% of respondents said that magpie control had increased in effort since beginning control in their location.

9.3. If you answered No to this question, do you think we should:

9.3.1. Not include magpie on general licences straight away, so that they would not be included on any general licences we grant in 2022?

NA

9.3.2. Wait until the next published BoCC Wales assessment before making the decision?

NA

9.3.3. Take another approach?

NA

9.4. Please give your reasons

NA

10. Do you think there are other species which may be suitable for inclusion on a general licence?

10.1. Yes

10.2. If you answered Yes to this question, please tell us which species and give your reasons

Rook

Although there is a lack of easily accessible historic data specifically for Wales, the data available for Rook at a UK level suggests the population in 1996 was estimated at 1.27 million nesting pairs and was about 40% higher than estimated in 1975-77 (J.H. Marchant & R.D. Gregory, 1999). This historic rise in population should be considered alongside the 22% decline seen in the UK rook population between 1995-2018 and this decline should be viewed in context of the historic rises. There is no easily accessible evidence to suggest that Wales does not reflect the whole of the UK in this regard, although the decline in Wales is documented as 58% between 1995-2018.

Where predatory species i.e., rook or magpie abundance remains high in comparison to prey species, even after a decline in said predatory species, we argue that the potential detrimental impact is still worth very careful consideration, especially where prey species are in serious decline and/ or when the financial impact to farmers livelihoods is great. We again argue against the rigidity of Principle 5 'Allowing lethal control of a 'target' species under a general licence will not risk putting it into an unfavourable conservation status' where species considered of BoCC status are automatically not considered for inclusion in a general licence, especially where historic increases in said species are not being considered in context of more recent declines. There is also no robust evidence to suggest control under a general licence negatively impacts a population at a national scale and therefore no evidence to suggest that the continued inclusion of said species on a licence would be detrimental to its future conservation status.

As stated above, there is no robust evidence to suggest that local control impacts a species at a national level, although we are hoping to gain further understanding of how local control could potentially skew data sets when survey sample size is low, as is the case for rook in Wales where the data is based on a sample size of 83. There may be potential that data can be skewed by local control, suggesting that perhaps commonly used BBS methodology may not be as reliable as previously considered, when species control and low sample sizes are variables.

Reviewing and reissuing general licences

11. Do you agree that general licences should be subject to regular review?

11.1. Yes

11.2. Please give your reasons

We support the notion that such measures should be regularly reviewed as part of a best practice approach to wildlife management.

12. Do you agree with the way in which we propose to carry out a regular review of general licences?

12.1. Yes

12.2. Please give your reasons

Whilst we agree with regular reviews we do not agree or support Principle 5 due to the reasons given above. We believe that using the BoCC Wales data may not be the most appropriate way of concluding whether a species should be included as a 'target' species under the general licences and instead suggest that the IUCN 'risk of extinction' list would be more appropriate.

13. Do you agree that general licences should continue to be issued for one year, and run from January to December?

13.1. Yes

13.2. Please give your reasons

We are happy with the current system and believe that users are also familiar with this concept. Currently we are not aware of a need to move away from this method however, in principle and in theory we may be supportive of bi-annual reviews also. However, they also have both pros and cons associated with them. Further stakeholder consultation should be considered before such measures are taken to fully understand the implications and practicalities.

14. Do you have any other suggestions concerning the regular review and reissue of general licences?

14.1. Yes

14.2. If you answered Yes to this question, please tell us your suggestions

In an ideal world we would like to see the impacts of licence decisions being researched and monitored. Although we sympathise that this is unrealistic due to the complexities of predator prey relationships and the ability to associate any changes with one particular species – it is seemingly impossible to do so.

However, we believe that where there are evidence gaps, targeted, peer-reviewed research should be undertaken to better understand those evidence gaps.

The form in which general licences are published

15. Do you have any comments on the format of general licences or any suggestions on how we could improve them in terms of presentation?

15.1. Yes

15.2. If you answered Yes to this question, please tell us your comments or suggestions

We recommend that NRW do not move to the HTML format as we believe it creates additional difficulties for users in the field. The format of HTML licence does not lend itself to being printed in a

way which is user-friendly. We would recommend NRW stick with producing PDF format general licences. This is especially important if users are advised to print and keep a copy.

Standard terms and conditions for general licences

16. Do you agree that a person authorised by a landowner or occupier to carry out actions under a general licence, should be authorised in writing by the landowner or occupier?

16.1. No

16.2. Please give your reasons

An unnecessarily imposed, additional piece of paperwork would represent a move away from simple, light-touch regulation and could in practice cause unnecessary complications.

As defined in this consultation, 'Authorised person' is defined in section 27(1) of the Wildlife and Countryside Act 1981 as '(a) the owner or occupier, or any person authorised by the owner or occupier, of the land on which the action authorised is taken'. There is no mention of how that person should be authorised, and no stipulation that it must be in writing. We would therefore suggest there is no legal justification to impose that the authorised person must be authorised in writing.

As an example of unnecessary complications: if due to unforeseen circumstances, an authorised person required the help of an additional person to adhere to the welfare requirements of a call bird in a Larsen trap, then it should be reasonable that a verbal agreement would be sufficient rather than a pre-arranged written agreement.

In addition, we would question why is such a requirement being suggested? If a person is found to be unauthorised, then by definition they would not be covered by the general licence and would not be acting lawfully. A simple conversation with the landowner or occupier would suffice to determine whether a person is authorised. It must be more efficient to have that conversation if, as and when it occasionally occurs, rather than stipulate that every authorised person must go through the process of undertaking additional paperwork. In any case, how does NRW plan to check whether all authorised persons are authorised in writing? If authorisation in writing is not to be checked, is it not a pointless exercise?

17. Do you agree that general licences should include a condition requiring users to first try to address the problem using alternative non-lethal methods, and to continue to make reasonable efforts to do so?

17.1. No

17.2. Please give your reasons

Firstly, we agree that the word 'solution' within the general licences applies to the policy rather than the otherwise-proscribed method of control as described in principle 3 in the consultation. That is, NRW are satisfied that a general licence is the only satisfactory solution to address widespread, complex, seasonally, and locally variable wildlife management problems. Which is slightly different than NRW needing to be satisfied that lethal control is the only satisfactory solution (it is of course fundamental to establish whether lethal control can be an effective option in the first instance). Therefore, if the nature of the problem warrants it, and if issuing individual licences on an annual basis for the widespread

purpose would be disproportionately burdensome, the policy would be to issue a general licence allowing the option of lethal control at the discretion of the practitioner.

By allowing lethal control alongside non-lethal methods, NRW ensures there is a suite of options available to manage wildlife. As stated above, it is of course fundamental to establish whether lethal control can be an effective option in the first instance. However, it is not then necessary to establish whether lethal control options are invariably effective, or that non-lethal control options are invariably ineffective in every circumstance faced by the practitioner. In specific circumstances either lethal or non-lethal approaches may be inappropriate or ineffectual or damaging to some other interest.

We argue that the general licence should not stipulate what and when non-lethal measures should be used. It should be at the practitioner's discretion to use both otherwise proscribed and non-lethal methods, provided NRW have satisfied themselves that the issuing of a general licence as the policy is the only satisfactory solution.

If it is deemed necessary to refer to non-lethal options within the general licences, we recommend that they do not occur as a condition but should be introduced as an advisory note instead. In addition, the wording would need careful consideration and words such as 'try' should be replaced with 'considered', and phrases such as 'as far as reasonably practicable' should be introduced.

18. Do you agree that general licence users should be advised to keep records of the actions they have taken under the licences?

18.1. Yes

18.2. Please give your reasons

GWCT recommends that, as part of a best practice approach, practitioners undertaking wildlife management should keep records of their wildlife management activities. We therefore agree that general licence users should be advised to keep records.

However, it is worth noting that we would not agree if it was a proposed condition as this would add a level of bureaucracy and there is minimal information given here as to the purpose.

With regards to reporting information, whilst we understand and agree that data collection is valuable in context, we are concerned with the anonymity of such data and the risk and danger which such data may place practitioners under. We are therefore pleased to see that NRW have concluded the value of the information would not justify the costs and burdens involved.

Complying with protected site requirements when granting general licences

19. Do you agree with our proposed approach to addressing protected site requirements when granting general licences?

19.1. No

19.2. Please give your reasons

We would prefer if NRW followed the methodology set by Defra and NatureScot with regards to issuing general licences with additional conditions to address protected site requirements, rather than the condition that the general licences cannot be relied upon in or near protected sites. We hope that

NRW will carefully consider this option as an alternative to the current methodology, as Principle 6 within the consultation states 'It may be necessary to include conditions in a general licence in order to satisfy this principle, including in particular in relation to the potential impact on protected sites' thereby confirming it is possible to do so in Wales.

We believe that the removal of the requirement to obtain written consent for SSSIs in Wales, in favour of having to apply for an individual licence, is the wrong decision. NRW suggest removing the need to have SSSI written consent relieves bureaucracy, without recognising the additional bureaucracy that an individual licence application places on both parties. Additionally, the argument that NRW are avoiding an unnecessary additional regulatory burden is void when contextualised against the requirement that other ancillary activities associated with, but not covered by, general licences (for example the use of a vehicle) would still need SSSI consent.

Whilst we recognise that individual licences can be applied for, it is difficult to comprehend why this added level of difficulty has been sought specifically for SSSI areas, some of which are critically important for threatened prey species. On one hand NRW recognises predation control as part of the solution to conserving and recovering populations of these threatened species such as curlew, lapwing and golden plover, whilst on the other hand NRW create a barrier and disincentivise practitioners before such conservation work can be undertaken.

Look to the Berwyn SPA and SSSI to see one of many examples of what happens when predation control is removed. The removal of predation control between 1983-5 and 2002 led to the disappearance of lapwing, a 90% decline in golden plover and a 79% decline in curlew (Warren and Baines, 2014). By deterring rather than encouraging predation control, there is the potential to hinder the conservation of many prey species in designated areas.

20. Do you agree with the list of sites and buffer zones where we are proposing that general licences should not apply?

20.1. No

20.2. If you answered No to this question, please tell us what changes you think should be made to the list, and give your reasons

Please see our answer above. We believe there is a better way of ensuring that general licences can cover designated areas, albeit with additional conditions, without impacting on the designating features, rather than the current methodology followed by NRW. In addition, if the list is to be kept, the reasons why designated sites are not included should be made transparent and the list should be reviewed. It is unclear why some of the sites are included on the list when considering the reasons NRW have given in this consultation. As one of potentially many examples, we would query why the SSSI Carmel Head, designated for its geological features, is included on the list as we cannot foresee a scenario where actions under the general licence would impact the designated features of that site.

Specific licences

21. Do you have any suggestions on how the process of applying for a specific licence, including the application forms, could be improved?

21.1. Yes

21.2. If you answered Yes to this question, please tell us your suggestions

The process could and should be streamlined to reduce the time taken for specific licences to be granted. A 40 working day turn around period is too long, and the level of evidence required is overly burdensome with little guidance given.

In England, for 2021 Natural England introduced a pre-application screening process which in theory speeds up the process, this process was implemented on the back of a disastrous 2020 where Natural England were unable to cope with the number of applications submitted. However, we are not yet convinced that the screening process has made any difference to the number of successful applications or made any difference to those on the ground wanting and willing to undertake conservation work under licence.

GWCT are please to read that within the consultation document under 10. Conservation of wild birds, animals and plants, Our proposals, Principles for conservation licencing, Principle 4: There should be sufficient evidence that lethal control of a 'target' species is likely to further a conservation purpose, NRW state:

'We have considered what is the appropriate level of evidence we should apply when deciding whether the lethal control of wild birds will genuinely further a conservation purpose. We do not consider that wild bird control should be licensed only where it is possible to 'prove' that the lethal control of target species X will result in a corresponding improvement in the conservation status of beneficiary species Y. We think that setting such a high standard of evidence is impractical and would make it difficult if not impossible to grant licences for conservation purposes. We consider that it should be reasonable to conclude that controlling a particular wild bird species is likely, on the balance of available evidence, to contribute to either an improvement in the local or national conservation status of another species, or is likely to contribute to the achievement of the conservation objectives of one or more protected sites'.

We strongly recommend NRW take this view when considering whether a specific licence should be granted, as it is our view that this is an area which Natural England have severely failed on, and we are keen that NRW do not make the same mistakes.

Unfortunately, Natural England have been asking for what seems to be an unobtainable level of evidence. We are told anecdotally that in 2020, 98% of individual licences applied for were refused by NE. It is not enough for NE to say that the application forms were inadequately filled in: to refuse 98% would imply the application forms were either appallingly designed or there was little intention to grant consents.

NE is requiring licence applicants to provide evidence that the species they seek to control is having a population level impact on the species of conservation concern they wish to protect. It is not clear what NE means by population level impact (it is not defined), nor is it likely that any licence applicant could actually provide this information – especially if practitioners have controlled the species under GLs in previous years (a high likelihood).

We are greatly concerned with the level of evidence required by NE and wish to advise NRW against making similar requirements. NRW should not require a level of evidence being that cannot be met, either because it is experimentally impossible; or the work needed to gather evidence has never been commissioned. NRW should avoid asking for evidence knowing it is not available from practitioners; or the evidence required is described but not defined, so applicants are left in ignorance of the 'test' to be met. In our view all of these would represent defective process.

What is an appropriate level of evidence to consent, say, an individual licence for the control of gulls or rooks to protect ground-nesting birds on moorland? In our view it should be photographic evidence of these birds foraging in or around the area for which a consent is sought, at a time of year when species of conservation concern are vulnerable to predation (i.e. in this case March-July). It is ecologically

reasonable to assume that flocks of foraging gulls or corvids will find any nests, eggs or chicks that are present and prey on them. Photographs can be date-stamped, and GPS co-ordinates provided.

Please see the attached document submitted with our response - 'Submission to the Habitats Regulation Assessment Working Group' which was produced by GWCT and submitted to the Habitats Regulation Assessment Working Group in England to highlight a number of concerns surrounding the individual licencing in England for further information.

A stakeholder working group could be collaborated with to co-design the application forms in order increase the efficiency of the process.

There is potential, dependent on the proposed species to be controlled and species to be protected, that a tiered system could be installed whereby more straight forward licence applications could be fast tracked if they meet basic criteria, whereas a more complex application would need to meet additional criteria to be granted.

Furthermore, it would be beneficial to have increased transparency with regards to specific numbers allowed to be taken, and the methodology undertaken to determine such numbers. There is a concern within the user community that the number of birds allowed to be controlled is often unrealistic to achieve the goal of the applicant. We are not able to comment verbatim, but fear that such community concerns can undermine the process and be off-putting to future applicants.

22. Do you have any suggestions on how the requirement to provide reports on activity carried out under specific licences, including the reporting forms, could be improved?

22.1. Yes

22.2. If you answered Yes to this question, please tell us your suggestions

Data could be summarised more effectively. For example, Actions could be summarised as particular actions which occurred between given dates rather than a specific date for each action. It seems overly burdensome to require the County, Grid Ref and Site Name. Is there not a system in place which recognises the county for example based on their original application and licence number?

It is difficult to suggest changes without access to, or knowledge of, the detail required by the administrative system in use, and without an explanation of what the data is used for.

Licensing the use of lethal methods

23. Do you agree with the overarching principles we have set out for deciding which methods should, and should not, be licensed for the killing or taking of wild birds?

23.1. Yes

23.2. Please give your reasons

These principles are less rigid, including wording such as 'unless there are good reasons' whereby the correct decision can be reached based on evidence and a common-sense approach. We therefore agree with these principles in section 6 - 'Licensing the use of lethal methods'.

24. Do you think there are other matters we should take into account in deciding which

methods should and should not be licensed?

24.1. No

24.2. If you answered Yes to this question, please tell us what else you think we should consider

The lethal methods we propose to allow

25. Do you agree that general licences granted by NRW for the lethal control of wild birds should allow the use of ALL methods which are not prohibited by section 5 of the Wildlife and Countryside Act 1981?

25.1. Yes

25.2. If you answered No to this question, please set out which non-prohibited methods you think should not be allowed under general licences and give your reasons

26. Do you agree that any general licences granted by NRW should continue to allow the use of semi-automatic weapons and cage traps?

26.1. Yes

26.2. Please give your reasons

These are recognised as the most efficient methods of undertaking the actions under the general licence. They are used legally and competently by practitioners, and allow efficient, effective, and humane control of target species. There are situations where only a cage trap is effective and, being a live capture trap, non-target captures can be released unharmed. The use of a semi-automatic weapon is desirable in many situations, allowing more flexibility to the user, increased humaneness, and increased efficiency whereby a task can be completed in a shorter timeframe therefore limiting any disturbance.

These methods are also deemed satisfactory by NRW, hence appearing on current licences and have been deemed appropriate and lawful during the Judicial Review which concluded in January 2021. We therefore can not think of any circumstance which would alter NRW's stance on these two methods of control.

27. Do you agree that any method which is allowed under general licences should also be allowed, if applied for, under specific licences?

27.1. Yes

27.2. If you answered No to this question, please tell us which methods you think should not be allowed and give your reasons.

Regulating the use of cage traps

28. Do you agree that NRW general and specific licences should specify the types of cage trap that may be used?

28.1. No

28.2. Please give your reasons

We do not strongly oppose this concept. On one hand we support the concept and associated clarity of defining trap 'types' and materials used in trap construction. However, we argue that if a 'type' of trap is currently deemed legal, and the current licences have been deemed lawful during the Judicial Review

which concluded in January 2021, then we see no reason to implement change for the sake of change and would remind NRW that licences should be as light-touch as necessary and easily understood and adhered to by users as per Principle 7 in the consultation.

Regarding the trap design sometimes referred to as a 'hawk trap' or 'owl trap' in the consultation, this is a historical portrayal of a trap which works very efficiently as a corvid catching trap. Historically the design was used with small songbirds to target raptors, however there is no evidence to suggest that when used with corvid decoys, top mounted catching compartments attract more or even less non-target species than side catching compartments. Additionally, the whole reason for using a live-capture trap is so non-target species can be released unharmed. To us, this seems an attempt to pre-judge the actions of individuals which, to all intents and purposes would be working lawfully and targeting the appropriate corvid species.

29. Do you agree with the types and specifications of cage trap which we propose to authorise for use under any general licences we grant?

29.1. Yes

29.2. Please give your reasons

Please see above the above answer to question 28. We are not opposed to the types of trap listed.

Use of meat-based bait in cage traps under our general licences

30. Do you agree with the proposal not to allow the use of meat-based baits under any general licences granted by NRW?

30.1. No

30.2. Please give your reasons

At certain times of the year and for specific reasons meat baits are essential to catch problem corvids causing serious damage.

These are when a decoy is not available, and the use of other baits is ineffective as the birds have not yet 'switched' to eggs yet i.e. early in the breeding season.

When corvids are serious damaging livestock early in the year and other baits are ineffective, a meat bait is necessary to catch birds causing serious damage.

There may also be other times when other baits and decoys are not effective, such as when a young decoy is not seen as a threat to a territory holding pair.

We recommended that with the correct wording the desired outcome can be achieved and recommend that NRW follow Defra's lead using the condition 'You must not use meat baits, including carrion, in any trap unless strictly necessary. This is to minimise catching non-target species.' Before giving advice on when it might be strictly necessary. We would argue that NatureScots' approach would be overly burdensome in Wales.

31. Do you agree that continuing to allow the use of diced meat as feed for decoy birds achieves the right balance between mitigating the risk of catching non-target species and the welfare of decoy birds?

31.1. Yes

31.2. Please give your reasons

We are happy with the continued ability for users to use diced meat to feed decoys. We reiterate that as a live-capture trap, if a non-target were to be caught as a direct result of using diced meat as decoy food, then it could be released unharmed.

Method of dispatching captured birds

32. Do you agree that licences should include a condition requiring captured birds of the target species to be killed out of sight of other captured birds and decoys, except in relation to multi-catch traps?

32.1. No

32.2. Please give your reasons

We are not aware of any evidence to suggest that this is necessary. We believe this stipulation comes from an anthropomorphic viewpoint with no clear evidence to support it. We could argue that the decoy bird would be pleased to see the back of the bird in the catch compartment which intended to drive it from its territory.

33. Do you agree with the proposal to allow users of multi-catch traps discretion to kill trapped birds within sight of other birds where they consider that the additional delay and handling caused by moving out of sight to kill each bird would cause more distress?

33.1. Yes

33.2. Please give your reasons

For the above reasons given in answer to question 32 and from a practical viewpoint. It is not practical and arguably much more stressful for the user to continuously enter and exit the trap if they were required to dispatch birds out of sight.

34. Do you agree that trap users should be required to kill trapped birds (of the target species) as soon as reasonably practicable after discovery?

34.1. Yes

34.2. Please give your reasons

We are happy with the wording 'as soon as reasonably practicable'.

Inspection of cage traps

35. Do you agree that NRW licences should specify, as a licence condition, the matters that must be addressed at each cage trap inspection?

35.1. Yes

35.2. Please give your reasons

We have no reason to oppose this in principle, but remind NRW that such conditions are already applied through other legislation i.e. the Animal Welfare Act 2006. Additionally, we would remind NRW that their current licences have been deemed lawful and of the need to keep licences as simple and straight forward as necessary. We believe that if any additional conditions are to be added that NRW liaise with stakeholders to discuss the wording.

36. Do you agree with our proposal to specify a maximum interval between inspections of 25 hours?

36.1. Yes

36.2. Please give your reasons

We are happy with this proposal, although we would be happier with a 26 hour maximum inspection window as an additional hour would not be detrimental to the birds welfare but would offer additional flexibility to the user.

Use of wing-clipped decoy birds

37. Do you agree with our proposal to include a condition prohibiting the use of wing-clipped birds as cage trap decoys?

37.1. Yes

37.2. Please give your reasons

We agree on welfare grounds regarding the call bird.

Administration of licences which allow use of cage traps

38. Do you agree that we should introduce a dedicated general licence containing standard terms and conditions for the use of cage traps?

38.1. No

38.2. Please give your reasons

We do not believe this is necessary and would be an overly burdensome step away from simple, easy to use and understand licencing for practitioners. Another licence containing standard terms and conditions for the use of cage traps has not been required in the past and we are not aware of any evidence suggesting it is needed now.

Mandatory registration or tagging of cage traps

39. Do you have any views on whether a mandatory scheme of trap registration and tagging in Wales would be beneficial?

39.1. Yes

39.2. If you answered Yes to this question, please tell us your views

We are of the view that a mandatory scheme of trap registration and tagging in Wales is not needed, and we are aware of no evidence which suggests otherwise. We understand why it might be felt that such a scheme would be beneficial but are not aware of any cases in England and Wales where licence conditions have been ignored and the trap user could not be identified. Without the evidence to suggest such a scheme is needed we think that this is another layer of unneeded bureaucracy.

Licences prior to 2019 contained the wording 'It is recommended that any cage trap or Larsen trap used under this licence shall carry a tag or sign that gives the number of the local Wildlife Crime Officer for the area. The tag shall also carry a unique code that allows the owner to be identified by the police. The operator of the trap will contact their local Wildlife Crime officer to obtain this code in advance of use of traps' as part of Condition 4. The fact that it was only recommended meant that adherence to this recommendation was very low, indeed if memory serves correctly even Wildlife Crime Officers were not aware of the recommendation. It is an example of an overly burdensome concept which was not adhered to, and which could not be regulated and would be against Principle 7 in the consultation document which states 'the general licence can be framed in terms which are clear to all users, compliant with all relevant legal requirements, and enforceable'. We should avoid such policy, especially if it is deemed unnecessary in the first place.

40. Do you have any additional views on the approach that NRW should take towards regulating the use of cage traps for lethal control of wild birds?

40.1. Yes

40.2. If you answered Yes to this question, please set out your views

To reiterate, we do not consider there is evidence to suggest a change is needed regarding regulating the use of cage traps. A fair approach is needed to ensure that farmers can protect their livelihoods and wildlife managers can manage wildlife as necessary, without an overly burdensome approach on either both users and NRW.

Considering other regulatory approaches

41. Do you have any views on areas of wild bird control licensing where the use of an alternative approach to specific and general licences could be beneficial?

41.1. Yes

41.2. If you answered Yes to this question, please tell us your views

We believe that NRW should continue to review class licences and that this should entail further stakeholder engagement. Currently there are evidence gaps as to whether a class licence would be beneficial or not, and as such more work is needed by all interested parties to ascertain their use.

Preventing serious damage or spread of disease to livestock, foodstuffs, crops, vegetables or fruit

42. Do you agree that we should continue to grant a single general licence for the prevention of serious damage?

42.1. Yes

42.2. Please give your reasons

This licence has been deemed lawful during the Judicial Review which concluded in January 2021. As such we see no reasons to alter it.

43. Do you agree that a general licence for the prevention of serious damage should specify which particular 'species to purpose' combinations are authorised for lethal control?

43.1. No

43.2. Please give your reasons

This licence has been deemed lawful during the Judicial Review which concluded in January 2021. As such we see no reasons to alter it. Altering it in the proposed way would make it less user friendly and more complicated.

44. Do you have any comments on the particular species to purpose combinations we are proposing should be authorised for lethal control for the prevention of serious damage?

44.1. Yes

44.2. If you answered Yes to this question, please set out your comments and give your reasons

We do not recommend that NRW follow this approach. However, if NRW deems it necessary the evidence provided by the APHA report published in August 2020 titled 'Review of the evidence base for inclusion of avian species on General Licences GL34, GL35 and GL36 in England' contains the relevant information, as does the table included in the English equivalent licence GL 42.

45. Do you agree that a general licence for the prevention of serious damage should not specify limits on the times of year when the licence can be used?

45.1. Yes

45.2. Please give your reasons

The current licence has been deemed lawful during the Judicial Review which concluded in January 2021. As such we see no reasons to alter it. Due to the scope of the licence, it would be impractical to specify limits on the times of year when the licence could be used. It would also add another layer of complication to the licence which is against Principle 7 of this consultation.

46. Do you agree with the way in which we propose to continue to define livestock?

46.1. Yes

46.2. Please give your reasons

We are happy with the definition in principle.

Conservation of wild birds, animals or plants

47. Do you agree with our proposed principles for licensing the lethal control of wild birds for conservation purposes?

47.1. No

47.2. Please give your reasons

We agree that the beneficiary species should be those which can/ do regularly breed in Wales and should be those which are considered vulnerable to predation by one or more of the corvid species. However, we oppose the position that the licences should only be used to protect red or amber listed species, especially when there is scientific evidence to demonstrate how protection improves the population of a beneficiary species, no matter it's BoCC status, such as chaffinch for example. There is no legal justification for NRW to determine which species can and cannot be conserved.

In addition, we believe that where a legal harvest of a green-listed beneficiary species can act as a resource for a landowner and even bring financial return, there should be no reason why that landowner cannot aim to conserve that resource. Licences can be granted under Section 16(1)(k) of the Wildlife and Countryside Act 1981 for a variety of reasons, including for the purposes of preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, for the purpose of protecting any collection of wild birds and for the purpose of conserving wild birds. We would argue that producing a harvest of wild game birds is as legitimate a land use as any other, and NRW should not inhibit this by unnecessarily restricting the use of the general licences to conserve BoCC species only.

In principle we agree with principle 2, however we question who determines, and in what circumstances is it determined, what is 'necessary'? For example, when and if a beneficiary species' population ceases to decline, has its conservation status been improved to a point where protection is no longer necessary? Or does that beneficiary species' population need to recover to a previous level before protection is no longer necessary? If so at what previous level would that be?

We agree with principle 3 and are pleased that NRW state 'For example, benefit to a local population can in principle be a legitimate conservation purpose justifying wild bird control, as well as improving the conservation status of a species considered at a national or international scale'.

We agree with principle 4 and recommend that NRW follow this principle when assessing individual licences too. The level of evidence required should be realistic, achievable and be based on sound, ecologically correct assumptions where controlling a particular wild bird species is likely, on the balance of the available evidence, to contribute to either an improvement in the local or national conservation status of another species.

Whilst we agree in principle with principle 5, we recommend that this should be advice rather than a condition. A condition should be avoided as it would require standards to be created, measured, and met, which would not be enforceable and would therefore contravene the original principle 7 within part C of the consultation.

48. Do you think there are any other principles we should follow when deciding whether to grant licences for conservation purposes?

48.1. Yes

48.2. If you answered Yes to this question, please set these out and give your reasons

Firstly, we would highlight our answer to Q17, where we highlight the need for a general licence when a solution is needed to address widespread, complex, seasonally, and locally variable wildlife management problems. Therefore, if the nature of the problem warrants it, and if issuing individual licences on an annual basis for the widespread purpose would be disproportionately burdensome, the policy would be to issue a general licence.

In addition, we strongly recommend the careful consideration of the impact removing a 'target' species would have on the beneficiary species. Where the impact is unknown (both at the local and national level) or, and there is an evidence gap, we recommend that the precautionary approach should be taken whilst research is undertaken to fill the evidence gap i.e., a target species should not be removed from a licence until the impact of removing it is fully understood and would not be detrimental to beneficiary species.

Where a target species' abundance is much greater, both at the local and national level, than the beneficiary species then the above argument requires extra gravitas, even when the target species has declined in recent years. This is the case for magpie, where the recent declines must be contextualised with population increases in the latter half of the 20th century. Please see the graph included in answer to Q7 which further emphasises this point, albeit at the UK level.

Conservation licensing: general or specific licences?

49. Do you think we should (1) retain a general licence for conservation of wild birds where the evidence indicates that a general licence is appropriate, (2) not grant a general licence for conservation of wild birds, (3) gather evidence on the extent to which GL004 is used before making that decision (4) adopt another approach?

49.1. [Select one option]

Option 1: Retain a general licence for conservation purposes

49.2. Please give your reasons

We consider option 1 to be the best course of action because it is the system which has already been deemed satisfactory by NRW and deemed lawful during the Judicial Review which concluded in January 2021. It is a system which practitioners are used too, and which places the least amount of strain on all parties involved to implement necessary conservation of prey species.

We believe that option 2 has the potential to be disastrous to the conservation status on many avian prey species across Wales. It would be overly burdensome, off-putting to many practitioners and would disincentivise practitioners to undertake wildlife management on private land across Wales. Whereas we believe that practitioners undertaking privately funded wildlife management for conservation purposes should be supported and incentivised to do so. This consultation states NRW's current standard of service is to determine all wild bird control licence applications within 40 working days. Eight weeks is far too long a period of time to wait to protect prey species during the breeding season and if GL 004 was withdrawn it is reasonable to expect many more licence applications and, without additional resource, an even longer period of time.

With regards to option 3, whilst we understand the desire to garner further information, we refer to a previous answer within this application (Q18) where we stated a concern regarding the anonymity of such data and the risk and danger which such data may place practitioners under. We also would highlight here that the information provided by NRW within this consultation states 'In most situations, we do not think that the value of the information we might obtain from a reporting system would be justified by the costs, practicalities and burden on users of introducing and administering such arrangements'. We would therefore assume that NRW have concluded themselves that the value of the information would not justify the costs and burdens involved.

Deciding the beneficiary species and the target species of a general licence for conservation

50. Do you agree that the most appropriate basis for identifying the beneficiary species of a general licence for conservation of wild birds is: red or amber listed species which regularly breed in Wales and which are considered vulnerable to predation by one or more of the corvid species concerned?

50.1. No

50.2. Please give your reasons

We agree in principle that the beneficiary species should be those which can/ do regularly breed in Wales and should be those which are considered vulnerable to predation by one or more of the corvid species. However, there is no proposed definition of 'regularly breeds' which is therefore subjective, and we would require further clarification before giving full support.

From an evidence-based perspective, we believe it is nonsensical to have a red or amber listed beneficiary species where there is no evidence of it breeding in Wales, and no evidence that predation control is required to conserve it. Albeit with the caveat that sound ecological interpretation/ assumption would be reasonably used where actual evidence is limited non-existent.

However, we oppose the position that the licences should only be used to protect red or amber listed species, especially when there is scientific evidence to demonstrate how protection improves the population of a beneficiary species, no matter it's BoCC status, such as chaffinch for example. There is no legal justification for NRW to determine which species can and cannot be conserved.

In addition, we believe that where a legal surplus harvest of a green-listed beneficiary species can act as a resource for a landowner, and even bring financial return, there should be no reason why that landowner cannot aim to conserve that resource. Licences can be granted under Section 16(1)(k) of the Wildlife and Countryside Act 1981 for a variety of reasons, including for the purposes of preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber and for the purpose of conserving wild birds. We would argue that producing a harvest of wild game birds is as legitimate a land use as any other, and NRW should not inhibit this by unnecessarily restricting the use of the general licences to conserve BoCC species only.

51. Do you agree that a general licence for the purpose of conserving wild birds should continue to be limited to conserving only the chicks or eggs of the beneficiary species?

51.1. No

51.2. Please give your reasons

Section 16(1)(k) of the Wildlife and Countryside Act 1981 allows NRW to grant licences for a variety of reasons, including for the purpose of conserving wild birds. We do not believe there is any legal standing for NRW to include the condition relating to only chicks or eggs.

Whilst NRW state 'We have limited it in this way because the available scientific peer reviewed evidence shows predation by each of the four species of corvid listed on GL004 on other species of wild birds is generally limited to predation of eggs and chicks', we are aware that there is evidence to demonstrate that adult beneficiary species can be predated by 'target' species. In addition, why control a species to protect a chick, only for it to be predated as an adult when it is potentially breeding itself and

or had dependant young. The value of an adult bird to the conservation status of that species is worth the same as it is at any stage of that bird's life, whether egg, chick, juvenile or adult.

We also argue that the inclusion of this condition rather than an advice note creates confusion as to when exactly control of a target species can take place. Does it have to be numerous eggs as an 's' is included in the wording and do chicks also need to be present as 'and' is included in the wording? There is also no legal definition of what a 'chick' is, leading to concern that a practitioner may be at risk of prosecution if they were undertake control to protect a un-fledged, at risk juvenile.

NRW fail to recognise that to deter expected serious damage, control must take place before eggs are laid for a variety of reasons. Firstly, it is too late to undertake a predation control regime once the first egg of a beneficiary species has been laid, in this instance many eggs will end up predated and the control will not be justified as it becomes inefficient. Secondly, NRW fail to recognise the welfare implications on the target species that waiting for eggs and chicks of the beneficiary species creates. Undertaking control early enough in the season, before eggs have been laid, allows us to remove territorial target species which have had time to observe where beneficiary species are nesting. Crucially it allows us to remove the territorial pair before they have dependent young themselves. The process is then to continue to remove target species as they enter the vacant territory, and again before they themselves have any dependent young. Waiting until later creates a welfare concern for target species chicks, hence why in England, defra have included the advice to 'avoid lethal control of birds under this licence during the breeding season whenever possible, by acting under this licence at other times of year'.

52. Do you think that a general licence for the purpose of conserving wild birds should include restrictions on the time of year when the licence can be relied upon?

52.1. No

52.2. Please give your reasons

Please see above answer to Q51 regarding the inefficiency of waiting until eggs and or chicks are present before control can be undertaken and the welfare concerns that this brings about regarding dependent young of the target species.

In addition, to restrict a time of year would presumably lead to set dates being introduced which, as any farmer who has been involved in recent agri-environment schemes will attest to, does not work when working in nature; as annual seasonal variance, geographical location and beneficiary species specifics plays apart on breeding dates, second clutches and so on.

Including set dates also could render some forms of control ineffective or unusable depending on the time of year, putting more stress on practitioners, and reducing the effectiveness of a programme of predation control as a whole. There seems to be no recognition from NRW that local population control leading into the breeding season is necessary to reduce predation pressure. Whilst Larsen trapping is effective at removing territorial pairs, non-breeding target individuals are still opportunistic predators which pose a potential to cause serious damage to beneficiary species. The ability to reduce the local population of target species can be required to reduce (not eradicate) predation pressure and there is no evidence to suggest that such control impacts the wider population outside of the local area.

53. Do you agree that carrion crow should continue to be included on a general licence for the purpose of conserving wild birds?

53.1. Yes

53.2. Please give your reasons

We agree with the reasons given within the consultation document and are pleased to see that NRW consider 'that there remains a high-medium strength of evidence of a moderate likelihood of a high effect of predation by carrion crow on wild bird populations. We consider that this supports the inclusion of carrion crow on a general licence for the purpose of conserving wild birds in Wales'.

54. Do you agree that jay should continue be included on a general licence for the purpose of conserving wild birds, but only in relation to the conservation of woodland bird species?

54.1. Yes

54.2. Please give your reasons

We agree with the reasons given within the consultation document and are pleased to see that NRW consider 'that there is a medium-high strength of evidence of some likelihood of a high effect of predation by jay on wild bird populations. There is strong evidence that nest predation by jay is likely to be greatest for open-nesting birds in scrub or woodland habitats. On this basis we believe that it is appropriate to include jay on a general licence for the purpose of conserving wild birds'. However, we disagree that 'that the beneficiary species of such control should be restricted to breeding wild bird species of scrub and woodland habitats' as this dismisses the impact jays can have on beneficiary species which nest in farmland hedgerows near to or between woodland blocks. Given that jay have increased in Wales by 52% in a 23-year period, and that the habitat-specific trend includes increases in mixed farmland and rural settlement, we argue that species which nest in or adjacent to this habitat should also be able to receive protection. If it is argued that little evidence exists of impacts on such species, we would recommend that the precautionary approach is followed until such evidence can be produced.

55. Do you agree that jackdaw should no longer be included on a general licence for the purpose of conserving wild birds?

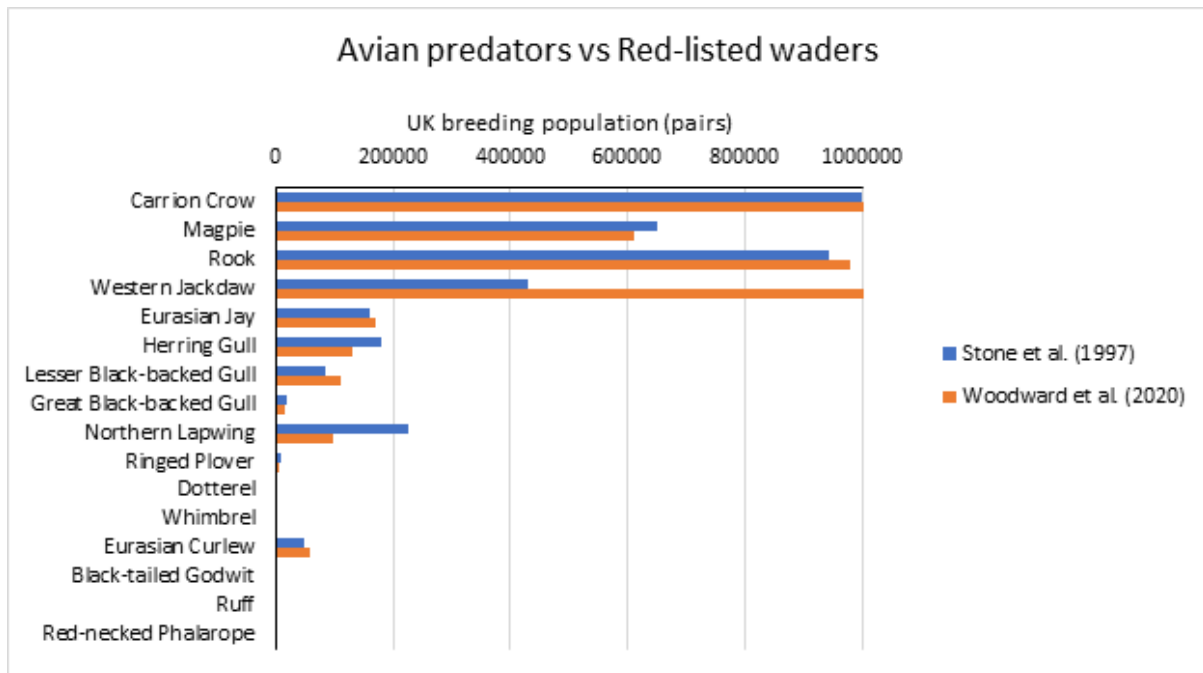
55.1. No

55.2. Please give your reasons

Although the APHA report states 'Overall, there is medium-low strength of evidence for an impact of jackdaw on the conservation of wild birds', it does not state that there is no evidence and no impact. In addition, although jackdaw are stable in Wales, there UK population has increased 139% in 51 years and continues to increase.

We would strongly recommend NRW to follow the precautionary principle before removing jackdaw from general licence 004 and reiterate that the impact that removing the target species would have upon current beneficiary species should be carefully considered. Again, if the evidence does not yet exist, research should be undertaken to fill the evidence gap, alongside using sound ecological interpretation and assumptions and anecdotal evidence from practitioners.

Furthermore, we would again highlight the graph used in answer to Q7, to demonstrate the comparison between target species i.e. jackdaw compared to other at-risk beneficiary species, to further emphasises this point, albeit at the UK level.



56. Do you think that Magpie is suitable for inclusion on a general licence for the purpose of conserving wild birds in light of the evidence of its impact?

56.1. Yes

56.2. Please give your reasons

Firstly, as stated within the consultation document, the APHA report and other scientific literature 'that there is a medium-high strength of evidence of some likelihood of a high effect of predation by magpie on populations of wild birds'. On this basis we believe there is enough evidence to justify the continued inclusion of magpie on general licence 004.

Secondly, given that we believe that magpie should remain a 'target' species on the general licences, as outlined in our answers to Q7, 8 and 9 above, we again strongly recommend NRW to follow the precautionary principle before removing magpie from general licence 004 and reiterate that the impact that removing the target species would have upon current beneficiary species should be very carefully considered. Again, if the evidence does not yet exist, research should be undertaken where possible to fill the evidence gap. However, with the caveat that single species predation impact is incredibly difficult, if not impossible to acquire and as such we recommend it would be reasonable to use sound ecological interpretation and assumptions, and anecdotal evidence from practitioners, unless there are good reasons not to.

Furthermore, we would again highlight the graph used in answer to Q7, to demonstrate the comparison between target species i.e. magpie compared to other at-risk beneficiary species, to further emphasises this point, albeit at the UK level.

In summary of our answers to Q7, 8 and 9:

We oppose NRW's proposal of needing to satisfy all the proposed principles before allowing the killing or taking of certain species under a general licence. Especially Principle 5 and part (i) which states 'We propose that a species will only satisfy this principle for potential inclusion on a general licence if it is 'green listed' in the most recently published BoCC assessment for Wales'.

We believe that this principle does not contextualise the current data and recent declines with historical data and dramatic population increases. As stated in answer to Q7, 8 and 9 a 'target' species could still be very abundant after a recent decline if it has declined from very high historical abundance. The target species' abundance must be compared with the beneficiary species' abundance. Removing the target species must be very carefully considered regarding the impact it would have on the current beneficiary species and the precautionary principle should be applied.

We believe that, and perhaps most importantly, NRW is wrong to use the conservation status relating to BoCC in Wales as a guide to determine whether species should be included as 'target' species in the general or indeed specific licences. It is too coarse a categorisation, because that species' abundance needs to be contextualised relative to the species we are looking to conserve. We believe a better barometer to determine whether a species could be controlled under a general licence would be to compare its categorisation under the IUCN 'risk of extinction' list with that of the species to be conserved. If a species has recently declined from historically very high abundance, then even with a recent decline, it is likely to still be abundant and have a low extinction risk.

We would argue that when there are smaller, more threatened, and declining prey populations, which are inherently closer to extinction due to less individuals within that population, it is of much greater importance to offer protection to those prey species instead of withdrawing their protection by removing the option of managing the predatory species. It could be argued that removing the ability to control the target species in this scenario would be irresponsible of the licencing body.

We reiterate that there is no evidence to suggest inclusion of a target species on a general licence can cause a decline at a national scale. Predation control undertaken under the general licences is short-term, targeted and localised to reduce predation pressure (not eradicate predation pressure) at a crucial time of year for prey species. It can be argued that if with the same effort you can annually take the same number of a particular species for many consecutive years, you would be doing so sustainably, i.e. your control would not be impacting the wider population. Furthermore, outside Wales, where intensity of control is arguably higher, there has been no detrimental impact to the main corvid species taken under licence: carrion crow has increased by 138% in 51 years in England and magpie has increased by 105% in 51 years.

To further reiterate and justify the need for magpie to be included as a target species in general licence 004 we want to ensure NRW do not overlook three recent studies. Whilst we believe that 'that there is a medium-high strength of evidence of some likelihood of a high effect of predation by magpie on populations of wild birds' is enough to justify the inclusion of magpie, this data often relies on a recurring confounding factor in that most predator removal studies are measuring the impact of a higher-level group i.e. corvids and sometimes other mammalian predators too. As stated above it is incredibly difficult to differentiate the relative impacts of individual predator species. There is recent scientific evidence that corvid removal does positively impact songbird populations locally. 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 summarised 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 (suppressing 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.

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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.

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.

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Preserving public health or public safety and preventing the spread of disease

57. Do you agree that we should continue to grant a general licence allowing lethal control of feral pigeon for the purpose of preserving public health?

57.1. Yes

57.2. Please give your reasons

There seems to be sufficient evidence on a number of grounds to maintain the inclusion of feral pigeon for the purpose of preserving public health. These are outlined in the APHA report published in August 2020 titled 'Review of the evidence base for inclusion of avian species on General Licences GL34, GL35 and GL36 in England' and referred to throughout Defra's Wild Birds: General Licence Review published in March 2021.

58. Do you agree that we should not grant a general licence for public health purposes allowing lethal control of any species other than feral pigeon?

58.1. No

58.2. Please give your reasons

We believe there may be justification for the inclusion of Canada goose and jackdaw on this licence also. The justification for including these species is given in the APHA report published in August 2020 titled 'Review of the evidence base for inclusion of avian species on General Licences GL34, GL35 and GL36 in England'.

59. Do you agree that NRW should require a gull management plan as part of any licence application to control gulls in an urban situation?

59.1. Yes

59.2. Please give your reasons

We are not opposed to the requirement for a gull management plan, so long as there is sufficient guidance for an applicant to complete such a management easily with minimal effort. Practitioners should be able to complete such plans swiftly and to the desired standard without the need for constant mentoring from the relevant NRW and the associated delays which benefit neither party.

Preserving air safety

60. Do you agree that NRW should continue to licence lethal control of wild birds for the purpose of preserving air safety through specific licences?

60.1. Yes

60.2. Please give your reasons

The approach and reasoning behind the proposal in the consultation document seems sensible and logical.

61. Do you agree that applications to control birds for air safety purposes should be required to include an appropriate management plan for how wildlife risks at the aerodrome site will be managed?

61.1. Yes

61.2. Please give your reasons

The reasoning behind the proposal in the consultation document seems sensible and logical. As described in the consultation, if Aerodrome managers already have a wildlife hazard management plan in place as required by CAA guidelines, then this should already be covered.

Fish-eating birds

62. Do you agree that any lethal control of cormorant or goosander for the purposes of preventing serious damage to fisheries or for conserving flora or fauna should continue to be subject to specific licensing?

62.1. Yes

62.2. Please give your reasons

GWCT sit on NRW's Fish Eating Bird Advisory Group.

Yes, licencing is necessary to ensure that lethal control is regulated to prevent over killing of these protected birds but whilst still allowing their control for the sustainable management of fish stocks. A number of fish species, particularly migratory salmon and sea trout are in sharp decline opposed to stable numbers of cormorants and modest declines in overwintering goosanders. Most salmon and sea trout populations in Wales are now classified as at risk, whereas Cormorants and goosander populations are deemed healthy, being classed as on the Green list. However, there needs to be a number of changes made to the licencing procedure to make it more efficient and effective both from the applicant and the grantee perspectives and the numbers of birds killed under licence should increase or decreased based on the health of current fish stocks. See answer 65.1 & 65.2.

63. Do you have any views on the development and application of a population viability analysis modelling tool to predict the impact of different levels of licenced lethal control on cormorant and goosander populations in Wales?

63.1. Yes

63.2. If you answered Yes to this question, please tell us your views

GWCT are supportive of the development of a goosander population model for the purpose of protecting threatened wild fish populations. However, as the adage goes a model is only as good as the data upon which it's based. We currently feel that there is insufficient high quality and importantly quantitative data upon which to base a sound model. We urge Welsh government to provide NRW with resources to provide robust data for a Wales model. The model needs to incorporate data on the numbers of goosanders and their locations in early spring. For example, the BTO survey over the winter of early 2021 needs to be repeated every 2-3 years. Juvenile salmonid stock assessment data needs to be incorporated along with expected baseline predation rates. Going forward, the importance of flow regimes, changing due to climate change, during the smolt migration period between March to May needs to be investigated. Drier springs and the resultant lower flows are highly likely to increase the predation rates of smolts. The 2021 BTO FEB survey showed that most FEB's were recorded in the main stem of rivers, this again increases the overlap between FEB and smolts in spring as they migrate to sea.

64. Do you have any views on the application of a licensing threshold that sets a limit on the number of cormorant and goosander that may be licensed to be controlled in Wales, informed by population modelling?

64.1. Yes

64.2. If you answered Yes to this question, please tell us your views

We agree there needs to be limits on the numbers of birds shot and that this should be through a population model. However, the model needs to take into account the current trends in wild fish populations. On stillwaters, the viability of the fisheries must not be compromised.

65. Do you have any views on the application of area or catchment-based licences for lethal control of cormorant and goosander in Wales?

65.1. Yes

65.2. If you answered Yes to this question, please tell us your views

Yes we are very supportive of moving to a catchment scale approach. The current licencing process for many applicants can be complex and requires too much detail from the applicant, this subsequently leads to poor quality applications and difficulties in processing them. The process should be streamlined, set out on a catchment-based approach with professional 3rd Sector advisors on hand to help and co-ordinate an annual catchment scale application. This is similar to the approach in England where Defra funds fishery advisors for the Angling Trust who provide professional advice to applicants and can co-ordinate high quality catchment scales applications.

66. Do you have any views on the efficacy of non-lethal and lethal methods for control of cormorant and goosander?

66.1. Yes

66.2. If you answered Yes to this question, please tell us your views

Evidence presented to the 2013 Defra review in England showed that on stillwaters a combination of scaring and lethal control was most effective. However, we believe that only lethal control is a realistic option on rivers where scaring would simply move birds to other parts of the catchment.

67. Do you have any views on the need for management plans to support specific licence applications for any lethal control of cormorant or goosander?

67.1. Yes

67.2. If you answered Yes to this question, please tell us your views

This is only realistic for Stillwater where actions such as increasing shelter/cover for fish could be implemented. Studies have shown that in certain Stillwater fisheries increasing cover will reduce the level of predation. On rivers NRW should themselves incorporate the control of FEB's into their own fisheries management strategies.

Invasive non-native species of birds

68. Do you agree that we should continue to authorise the control of ruddy duck and Canada goose under general licences?

68.1. Yes

68.2. Please give your reasons

We agree due to the threat Ruddy Duck cause as an invasive species to native species and due to the serious damage Canada geese cause to crops.

We highlight that Canada goose has previously been controlled under the conservation licence when it addressed the conservation of fauna and flora as Canada geese can negatively impact native flora and sensitive habitats. We do not feel the inclusion within GL 001 covers this aspect and argue that there should be scope within the licencing to permit control to protect native flora. Further information relating to the damage Canada geese can cause native flora is covered in the Natural England Technical Information Note TIN009: The management of problems caused by Canada geese: a guide to best practice.

69. Do you agree with the approach we propose to take in relation to other invasive non-native species of wild birds?

69.1. No

69.2. If you answered No to this question, please give your reasons

Given the GB non-native species strategy, and the proposed Generic contingency plan for Invasive Non-native Terrestrial Vertebrates (Wales), we can think of no reason for not including the other non-native species referred to within this section of the consultation. Indeed, they have been included on the licence in England. There are two problems which waiting could create, one being that the control is delayed by a year until a new licence including the species is published and two being that the licences are changed mid-year to include those species which would cause confusion. In theory and in the worst-case scenario, the licences could be changed several times in one year to add those species one at a time as they appear in Wales. In our opinion it would be better to pre-empt their arrival and add them to the species now. Those organisations, including the GWCT, who inform members of changes to the general licences through press releases could cover the changes at the beginning of the year and then no further disruption would be caused. We are not aware of any positives of leaving those species off the licences until they become a problem.

Other matters relating to how NRW regulates the lethal control of wild birds

70. Do you have any other views or information which you think may be relevant to this consultation and which you would like to share with us?

70.1. No

70.2. If you answered Yes to this question, please set out your views

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APHA 2020. Review of the evidence base for inclusion of avian species on General Licences GL34, GL35 and GL36 in England. APHA Report to Defra

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