

Farmhouse Triangle response to Case Officers report to planning committee and Biodiversity Officers response to the application

Summary

This note responds to the concerns raised by the Planning Case Officer and the Biodiversity Officer and sets out why the author and the applicant believe the mitigation measures proposed as part of the development represent a betterment when compared to the approved scheme for this area of land. In summary it is argued that this is because:

1. Even with the agreed newt mitigation strategy the Hunts Grove newt population will be isolated from the wider meta-population of newts by the M5, the A38, the B4008 and the new development at Hunts Grove. In addition, the future development of the allocated land south of Haresfield Lane (LSoHL) will further isolate the Hunts Grove newt population. As such in the longer term this isolated population will be vulnerable to stochastic changes and inbreeding which will increase the chances of the loss of the population.
2. The proposal to move the newt population to a newt reserve south of the M5 will provide high quality breeding and terrestrial habitat for newts in a bespoke newt reserve with connectivity to three existing newt populations in the local landscape thereby enhancing the long-term viability of the newt meta-population. The proposed newt reserve in contrast to retaining the newts in situ at Hunts Grove will not be isolated by busy major roads and new development. Railway lines are not, as suggested, a barrier to the movement of newts and elsewhere in the country provide important habitat for newt populations. Minor country roads, whilst presenting a low mortality risk are not a physical barrier to newt movement and are an improvement on the mortality risk and physical barrier represented by new urban roads.
3. The effectiveness of proposed bat mitigation measures will not be diminished by the relocation of the bat barn approximately 130 m to the south of the approved location especially considering the nature and status of the roosts that mitigation is seeking to address. It will provide the features required by the target bat species, be located away from light sources in the new residential development, be located within an area of open green space in close proximity to established and proposed linear habitats likely to be used as flight lines and foraging habitat by bats.
4. The proposal to give the bat house a dual use, and thereby value to the local community, is likely to improve the policing and maintenance of the bat house compared to a structure that has no use or 'local ownership'. This and the location of the bat house within the allotments will ensure a better long term future than the current agreed mitigation.

In conclusion, the concerns expressed by the officers are fully addressed by the proposals for newt and bat mitigation and indeed a better solution will be achieved that secures the long term favourable conservation status of the protected species. As such it is considered that the recommendations for refusal on the grounds of adverse impacts on newts and bats should not weigh against the determination of the application. In fact the improved mitigation measures are considered a positive element of the application.

Introduction

This document sets out the applicants (CFL's) response to the Case officers report to Planning Committee, which in turn has been informed by the response to the planning application made by the Biodiversity Officer. This note has been prepared by Dr Peter Shepherd of BSG Ecology, who has

been advising on the Hunts Grove development since before the original planning application (Spring 2004).

Biodiversity Officer's report

The conclusion of the Biodiversity Officer's report states:

Recommendations

Refusal is recommended for the following reasons:

The proposal will have significant impact on biodiversity. Licences (under The Conservation of Habitats and Species Regulations 2017 (as amended)) have been issued by Natural England which secure the site as mitigation and as a biodiversity enhancement area for the consented Farmhouse Triangle scheme which sits within the wider Hunts Grove develop. The proposed new mitigation would also be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

This reason for refusal appears to relate to impacts on newts as it refers to licences issued by Natural England which only relate to newts. In relation to newts the Biodiversity Officer report states:

Newts

The proposed proposal will see the loss of the existing breeding pond, the agreed mitigation site and fragmentation of the agreed Green Infrastructure Corridor. The suggested mitigation for this loss on the proposed new allotment site (on the opposite side of the M5) would not maintain the favourable conservation status of the species as previously agreed. This site is an isolated land parcel surrounded by barriers to GCN dispersal (M5, roads and railway line) and is fragmented from the existing meta population.

However, the Planning Case officer's report also refers to adverse impacts on bats and as such it is assumed that the last sentence of the proposed reason for refusal provided by the Biodiversity Officer includes bats as well as newts. The last sentence states: *The proposed new mitigation would also be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).*

The Biodiversity Officer's report in relation to bats states:

Bats

The Farmhouse and Main Barn are known to be used by 6 species (day and night roosts) of bats. The existing mitigation proposals for the consented Farmhouse Triangle scheme which sits within the wider Hunts Grove development, include the creation of a bespoke bat house/barn to replace the loss of the Main Barn. This bat house is to be located within close proximity to the lost barn to ensure that the mitigation will work.

The proposal will see the loss and disturbance of bat roosts within Colethrouph Farmhouse and the Main Barn. The suggested mitigation for the loss of the Main Barn will see the modification to the existing design (bespoke bat house) and its relocation further away from the existing Main Barn (lost barn) to the allotments site, so that it can also be used by allotment holders as a store and toilet.

The section on bats in the Biodiversity Officer's report does not include a specific recommendation for refusal on bat grounds.

Response

This response has been prepared in the absence of a discussion with the Biodiversity Officer as it has not proven possible at the time of writing to arrange such a discussion in advance of the planning committee. The applicant remains willing to discuss concerns expressed by the Biodiversity Officer if this is considered helpful. In response to the reason for refusal set out in the Biodiversity Officer's report BSG Ecology would make the following comments/argument:

Newts

The Biodiversity Officer's concern in relation to newts is that the translocation of the newt population to the proposed allotment and newt reserve site south of the M5 "*would not maintain the favourable conservation status of the species as previously agreed*". The reasoning for this assessment is that the proposed allotment and newt reserve site "*is an isolated land parcel surrounded by barriers to GCN dispersal (M5, roads and railway line) and is fragmented from the existing meta population*"

BSG Ecology has been involved with the Hunts Grove development and the land north of the M5, east of the B4008 and south of the A38 since the original planning application and has an ongoing role. Throughout this period BSG Ecology has discussed best approaches to conserving newts as part of the Hunts Grove development with officers at Stroud District Council and ultimately with Natural England through the licensing process. In common with concerns expressed about Favourable Conservation Status by the Biodiversity Officer these discussions have been focussed on finding the best solution for the long-term viability of newts in this local area. This did include consideration of the possibility of moving newts to a more sustainable location in the long term as part of the initial options for the Hunts Grove development. However, at the time the masterplan and newt strategy were developed translocating the newt population off site was not an option because Natural England's approach to licensing at that time was to retain newts in situ within the fabric of the development.

Working within this constraint the approach to conserving newts on site was based around the retention of the only breeding pond at Colthrop Farm, the retention of linked green space within the wider development within 250 m of the breeding pond and the creation of new ponds to provide additional breeding sites and a link to the open farmland south of Haresfield Lane and the existing ponds close to the M5 junction with the A430, even though they did not support newts. The aim was to mitigate the impacts on the newt population arising from loss of farmland terrestrial habitat by increasing the population of newts within the retained greenspace to increase its resilience. This was considered important given the isolated nature of the newt population within the Hunts Grove development.

Since the establishment of the newt strategy based on retaining newts on site approaches to newt conservation have changed particularly since 2017 when Natural England introduced District Wide Licensing approaches to newt conservation. The Natural England Technical Information Note (TIN) 176 sets out the framework for the new approach and the thinking behind it and states:

District licensing of development affecting great crested newts (GCN) involves consideration of the conservation of this species at a geographical scale broader than the development site in question. It can allow harm to individual GCN and their habitat caused by a development to be compensated for by the creation and/or restoration of suitable amounts of new habitat elsewhere.

In appropriate cases, instead of requiring harm to GCN to be avoided or mitigated at a development site, GCN are benefited elsewhere in the area at the developer's expense. This safeguards the

conservation status of GCN in the area concerned and also represents a significant streamlining of the GCN licensing element of the development consent process.

The new and current approach embodied by District Wide Licensing clearly recognises that creating new habitat in better locations in the local area can be a better option for maintaining favourable conservation status of newts than retaining newts on site in close proximity to new urban development.

It should also be noted that at the time the newt strategy and the Hunts Grove masterplan was developed the allocation of land south of Haresfield Lane (LSoHL) was not an established future development allocation. The retention of the arable farmland south of Haresfield Lane was considered a benefit in the original newt mitigation strategy. With the allocation a proportion of the open farmland will in future be lost reducing the ability of newts to disperse within the land between the A38, B4008 and the M5 and the Hunts Grove development.

During the development of the on-site newt strategy it was recognised that the retained population would be physically isolated from ponds in the wider landscape by the M5, the A38, the B4008 and the new development at Hunts Grove. In the long term this isolated population will be vulnerable to stochastic changes such as disease or introduction of fish into ponds from the new urban population, unexpected increase in predation or a series of severe droughts etc. These could reduce the population size to the point where it is unable to survive. In a connected landscape new recruits from other populations would either bolster the affected population or enable recolonisation of ponds if the population died out. This is a typical process in meta-population dynamics but does require sufficient connectivity to enable these processes to take place and why habitat fragmentation can have harmful effects over a longer period of time. The retained population on site is not connected to populations of newts in the wider landscape and is therefore an isolated low (2021) to medium (2018) size population.

Connectivity to other colonies in a meta-population (several colonies in the landscape with interchange between them) in the longer term is also important to ensure populations remain genetically robust. Without occasional recruitment of new DNA into a colony within a meta-population as a result of the arrival of newts from other breeding populations in the landscape inbreeding in an isolated population increases the risk of local extinction due to reduced breeding success. Within newt populations a small percentage of newts disperse from a natal pond and do not return to it, but they will only successfully find and interact with other populations in the landscape if they can access them.

BSG Ecology (and the Applicant) shares the concern expressed by the Biodiversity Officer about ensuring the long term favourable conservation status of newts in this part of the world. However in contrast to the concern raised and recommendation of refusal we consider that moving newts south of the M5 will improve connectivity between the wider dispersed colonies in the landscape and that retaining newts on site through the existing newt strategy will ensure continued isolation of the newt population at Hunts Grove, which make the population more vulnerable in the longer term and would miss the opportunity to improve connectivity within the meta-population south of the M5. The existing population at Hunts Grove is isolated by the M5 corridor to the south the busy A38 and B4008 roads to the south-west and the new Hunts Grove development to the north. There are no known local populations within this area other than the population centred on the pond at Colethrop Farm and as such no likelihood of genetic interchange with the wider newt populations.

In contrast the proposed newt reserve south of the M5 is not isolated from the existing meta population in the open countryside between Haresfield, Colethrop and the M5. It will be better

connected to the meta population in the local area increasing the likelihood of long-term survival of the translocated newt population.

Our reasoning for this is as follows:

1. The land between Hunts Grove development the M5, A38 and B4008 is an isolated location with no connectivity to the wider landscape and newt populations to the south of the M5 corridor. It is effectively cut off from other newt populations in the landscape by three major roads and significant new development.
2. Isolation at the Hunts Grove location will increase further and available habitat will decrease with the development of the allocated land south of Haresfield lane. It is currently open farmland but is an allocated site for further residential development.
3. The proposed newt reserve south of the M5 is directly linked to open countryside. There are minor country lanes in the landscape, but these do not represent significant barriers to movement or risk of mortality as they are narrow, generally do not have kerbs and are relatively infrequently used compared to urban environments and the future road network within the Hunts Grove development.

The land south of the M5 is in much closer proximity to other existing newt populations at Pool Farm (within 500m of the proposed newt reserve), a series of field ponds between Colethrop and the M5, a ditch/pond associated with the railway embankment at Haresfield and a series of ponds north west of Haresfield (see Figure 1). This is in stark contrast to the situation north of the M5.

4. The railway line is not a barrier to movement of newts and may even provide valuable terrestrial habitats for newts and improved landscape connectivity. The railway embankments and rail side habitats comprise woodland, scrub and grassland and they are not subject to agricultural or regular management. The embankments may also provide hibernation opportunities. Unlike roads railways do not present a high risk of mortality as rails are raised up above the ground and train services are much less frequent than main roads. BSG Ecology worked on the first phase of the East West Rail project between Oxford Parkway station and Bicester and the railway embankment and associated burrow pits support significant populations (Large to Medium) along this length of railway (12Km). During the trap out exercise for that project large numbers of newts were trapped from the railway clinker including under rails and on railway embankments. In addition. there are existing underpasses that link the farmland either side of the railway.
5. To further enhance connectivity the applicant is willing to create/restore field ponds in the land between Pool Farm and Haresfield Lane (see Figure 1). This will further improve connectivity in the landscape.

Given the above it is considered that the proposed newt reserve south of the M5 represents a better location for newts as it is connected to the meta population of newts in the landscape south of the M5. Retained newts within the Hunts Grove development will be extremely isolated by the current and future development and the significant barriers represented by the network of major roads.

For the reasons set out above BSG Ecology and the applicant are of the strong opinion that the proposed translocation of newts out of the highly isolated location of the Hunts Grove development to a better connected site is a betterment of the current existing strategy of retaining newts on site. As such we do not agree with the assessment made by the Biodiversity Officer that this proposal *would not maintain the favourable conservation status of the species* especially as the reasoning for this opinion is that the location south of the M5 is more isolated than the land at Hunts Grove. It

clearly is not and as such is likely to result in an improvement in the Favourable Conservation Status of newts in this local area and thus their natural range. Furthermore it provides an ongoing benefit for when the land South of Harefield is developed.

Bats

The Planning Case Officer's report states:

12.6 The proposed development would also change the mitigation for the loss of roosting habitat that is present in the barn associated with Colethrope Farm. The agreed mitigation provides a bespoke bat roosting house. This would be located in close proximity to the barn to ensure that the alternative provision is used by the bats. The proposed development would modify this mitigation and move it further away from the barn and to within the remaining area of allotments on the Northside of the M5. However this would be combined with a store and toilet for the allotment users.

12.7 Whilst this would continue to provide some mitigation for the loss of the barn as a bat roost, it would be a retrograde step in terms of the quality of the mitigation. This is because it would potentially allow for disturbance by the allotment users and would be further still from the original bat roost in the barn. This would result in harm in respect of compromise to the mitigation secured as part of the Master Plan. Accordingly, moderate harm against the proposed development is attributed to this factor.

The Planning Officer's report acknowledges that the proposed mitigation for bats in the form of a bat house is in essence the same as that proposed under the agreed planning consent for Hunts Grove, but raises concern that the bat house will be further away from the Farmhouse and Main Barn and as such will be less likely to be found and used by bats and that disturbance by allotment holders will also adversely affect use by bats.

These concerns should be considered in light of the current status of roost sites used by bats at the Farmhouse and Main Barn as the type of roost compensation is seeking to replace will play a key part in the success or otherwise of proposed compensation and the significance of any effect on the conservation status of bats should compensation be unsuccessful. Whilst up to 6 species of bat have been recorded the level of use is very low (1 to 3 bats of each species) and it is important to understand no significant roosts (maternity or hibernation) that are of particular importance for the conservation of local bat populations have been recorded. Day and night roosts used by small numbers of bats are numerous within the territorial range of local bat populations and individual bats or groups of two or three bats can be recorded in trees and all types of built structures with individual bats often moving between one roost site and the next throughout the active season. As such non-breeding females and male bats will frequently explore new structures including bat boxes and adapt to new roosting opportunities that appear within their territorial area, hence why most developments seek to increase roosting opportunities in new buildings. The likelihood of success of new roosting provisions is therefore much higher than if the replacement roost were aiming to provide specific conditions for a maternity roosts. As such the relocation of the proposed bat house some 130 m away from the farmhouse and main barn in itself is unlikely to materially affect the likely success or otherwise of the proposed bat house as it will be readily found by the local bat population at the location proposed.

A range of factors are more likely to affect success of any new roosting opportunity including high levels of artificial light from new housing, street lamps or playing fields, especially for more light sensitive species such as natterers bat, and a lack of connectivity to flight paths. These factors were

considered when identifying the best location for the proposed bat house, which is some 30 m away from new housing and roads within the allotment garden close to the mature vegetation of the northern embankment of Haresfield Lane. The vegetation on the embankment provides flight lines along the hedgerows on the lane in both northerly and southerly directions. New semi-mature tree planting and hedgerow planting is proposed along the southern edge of the allotments which will provide a dark flight route parallel to the M5 along the mitigation corridor east and west and into the open spaces of the mitigation corridor.

The final factor that influences whether a new roosting opportunity succeeds or not is the design of the bat house and the provision of roosting features within it. Detailed roosting designs have not been proposed as these will be determined through the licensing process, however, the dimensions of the building exceed the minimum bat house requirements set out in the Bat Mitigation Guidelines and as such is considered to be large enough to accommodate the size and diversity of features for the target bat species. Detailed designs will ensure that the bat house will provide external roosting features for crevice dwelling species such as pipistrelle and *Myotis* species, and internal void space and roof void for species such as brown long eared bat. A free flight path access for lesser horseshoe bat into the void and roof space of the bat house will also be provided. In addition to the bat house the new development will provide additional roosting opportunities in the new buildings through the provision of bat tubes within a proportion of the buildings and bat boxes on trees on site and in the newt reserve south of the M5. Given the proposed habitats in the newt reserve and the provision of additional allotments it is considered this part of the development will attract significant foraging activity by a range of bat species.

There is a concern that the likelihood of success of the bat house would be reduced by disturbance from allotment holders. However, bats roost in many locations that are also used by humans for a wide range of activities and human activity and bat use in a building are not mutually exclusive. In fact, many of our bat species rely heavily on human structures for roosting. As such it is unlikely that the use of the bat house by allotment holders as proposed will adversely affect the success of the bat house. There are positive benefits of providing a use for a building designed for bats. From the experience of BSG Ecology roost buildings erected with no use and therefore incentive to maintain them can decline through neglect or vandalism such that the building no longer supports the roosting opportunities provided. By enabling part of the bat house to be used by allotment holders it will have a value to them who are then more likely to police its use and seek to maintain the building. As such it is less likely to be subjected to vandalism or anti-social activity that might generate a much higher level of disturbance. Potential disturbance by allotment holders has been carefully considered and the extent of use of the bat house and areas available for use by the allotment holders has been limited to ensure the features proposed for bats can be provided. The areas that will be available to allotment holders will be restricted to the northern side of the house and will ensure a full height void is retained on the south side of the building as well as the whole roof void.

Given the above it is not considered that the new location of the bat house will diminish the value of the structure and the likelihood of its success. The location of the bat house within the allotments with limited use by allotment holders also provides a purpose for the new structure making it less likely to be neglected or vandalised. As such it is considered that the concerns raised by the Planning Case Officer are unlikely to materialise and that the bat house will provide a good compensation habitat for bats at least as good as the agreed mitigation for bats.

Note on Figure 1

Figure 1 shows locations of 13 existing ponds (darker blue) within 1.3 km of the proposed newt reserve, proposed location of 6 new ponds in the landscape (light blue), the location of recent records of positive newt licence returns (2015 and 2017), two clusters of existing ponds at Mount Farm next to Haresfield (red circle) and north of Colethrop (yellow circle) and the proposed cluster based around the newt reserve and including Pool Farm (purple circle) and the approved balancing pond which will be a permanently wet pond feature. Currently two new ponds proposed to replace the loss of the pond at Colethrop Farm.

The pond cluster north of Colethrop is all within 980m of the proposed newt reserve and the cluster at Mount Farm where there is a known newt population is within 1.3 Km of the proposed newt reserve.

The land between the Mount Farm cluster and the Pool Farm cluster is in the ownership of the applicant

Figure 1 – Proposed ponds and existing ponds within 1.3km of the proposed newt reserve

