



The Ecology Co-op

ENVIRONMENTAL CONSULTANTS

Building B, Lords Wood Barns, Petworth, GU28 9BS

Tel: 01798 861 800 - E-Mail: info@ecologyco-op.co.uk - Website: www.ecologyco-op.co.uk

Addendum to Ecological Information - Alternative Badger and Reptile Mitigation Strategy

29 Seabourne Road, Bexhill-on-Sea

Author: Rebecca Mortensen BSc, MSc, QCIEEM

Reviewed by: Dan Bennett BSc (Hons) MCIEEM

28th March 2022

Project No: P5107

The Ecology Co-operation Ltd
Registered Office: Greens Court, West Street, Midhurst, West Sussex, GU29 9NQ
Company number: 8905527



DOCUMENT CONTROL

Issue No	Author	Reviewer	Issue Date	Additions/alterations	Notes
Original	RM	DB	28/03/2022		

DISCLAIMER

This report has been prepared by The Ecology Co-operation Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client. Our terms and conditions can be provided in full upon request.

We disclaim responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client, and we accept no responsibility, of whatsoever nature, to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

This report only becomes the property of the client once payment has been received in full.



Report Summary

1. This document provides a summary of findings to date of all ecological surveys undertaken at 29 Seabourne Road, Bexhill on Sea, and sets out an alternative proposed mitigation strategy for Badgers and Reptiles in respect of a planning application for the demolition of existing bungalow and detached garage and construction of 3No. new houses (RR/2020/2132/P (previously approved under RR/2017/2588/P). It has been prepared at the request of the Senior Planning Officer at Rother District Council to address whether the badgers and reptiles present at the site can be relocated to off-site locations, and the impacts upon neighboring properties should they be retained on-site.
2. Following initial surveys undertaken in 2020, a main badger sett and an ‘annex’ sett were identified within the site boundary. There are an additional 2 active entrances, evidently connected to the main sett, situated on the neighbouring property to the west, 2 Bishops Walk. There is also evidence of tunnel excavation beneath the southern boundary and under the bordering property, 4 Bishops Walk. A population of slow worms was identified during a presence absence survey undertaken June-July 2021, with a peak count of 17 individuals.
3. Epoch Ecology recommended a mitigation strategy including the closure of the ‘annex’ sett and the temporary exclusion of badgers from the main sett for the duration of construction works with full access given to the badgers on completion of the development. The population of slow worms were to be retained on-site using vegetation management and destructive searches supervised by a qualified ecologist to displace them from the construction zone, and the retention and enhancement of suitable habitat on part of the site to support them in the long term.
4. It is understood that Natural England granted a license for ‘interference with a badger sett and exclusion of badgers from their setts and closure/destruction of setts’. This was revoked due to access being denied to some entrances for the temporary exclusion of badgers amid concern about the impact on adjacent properties. Natural England have subsequently advised Rother District Council that relocation of badgers off-site is not a practical option.
5. The Ecology Co-op undertook a re-evaluation of the submitted information to date, and, following a site visit on 8th March 2022 by Dan Bennett MCIEEM, an alternative mitigation strategy is put forward. This involves construction of an artificial sett in the south-west corner of the site to replace the main sett, followed by the exclusion of badgers and removal of the existing setts on the site. The procedure will follow standard guidance for badger sett relocation under licence from Natural England, ensuring that no animals are harmed in the process, and will be combined with a series of ‘proofing’ measures to prevent



further excavation by badgers into neighbouring properties or the new development. This strategy does rely on the full co-operation of the neighbouring homeowners but will be beneficial to them in the long term by preventing structural damage to all buildings while ensuring that the badgers are able to continue to exhibit their natural behaviour and remain safe at the site.

6. The translocation of slow worms to an off-site receptor site is feasible but relies on a suitable receptor site being found nearby. There are two potentially suitable areas within 1km of the application site where a receptor site could be created here for the off-site translocation of slow worms, provided that permission can be obtained from the landowners. However, it is our opinion that the effort required to secure a suitable off-site receptor site is disproportionate to the scale of impact, and that the population can be adequately safeguarded by the on-site mitigation already proposed, provided that it is timed after badger mitigation.



CONTENTS PAGE

1 INTRODUCTION.....	1
1.1 Background.....	1
2 BASELINE CONDITION	1
3 MITIGATION STRATEGY	2
3.1 Current Mitigation Strategy.....	2
3.2 Proposed Alternative Mitigation Strategy	3
3.3 Outline of mitigation methods	4
4 Mitigation Schedule	8
A1 Artificial Badger Sett	8



1 INTRODUCTION

1.1 Background

The Ecology Co-op has been commissioned by Christie Developments Ltd to re-evaluate the badger and reptile mitigation for the proposed construction of three residential dwellings.

This addendum has been prepared in lieu of the Rother District Council planning committee meeting, due to be held on the 29th March 2022, to provide a summary of ecological surveys to date and present an alternative mitigation strategy for badgers and reptiles at 29 Seabourne Road, in respect of a planning application for the demolition of existing bungalow and detached garage and construction of 3No. new houses (RR/2020/2132/P (previously approved under RR/2017/2588/P). It has been prepared at the request of the Senior Planning Officer at Rother District Council to address whether the badgers and reptiles present at the site can be relocated to off-site locations, and the impacts upon neighbouring properties should they be retained on-site.

The proposed development site is located at 29 Seabourne Road, Bexhill-on-Sea, East Sussex, TN40 2SD. The central grid reference for the site is TQ7594 0875.

This appraisal is based on three reports by Epoch Ecology¹²³ produced in 2021, as supplied by the client and understood to be submitted in support of the planning application, and a walkover survey undertaken by Dan Bennett MCIEEM on 8th March 2022.

2 BASELINE CONDITION

Initial badger surveys carried out by an unnamed ecologist in October 2020 identified a main badger sett with 8 active entrances situated in the north-eastern corner of the application site. Two more entrances were located in the adjacent property, 2 Bishops Walk, which are likely to be directly connected to the main sett. An 'annex sett' was also identified to the south within the footprint of the development site. Signs of badger activity including well-worn paths, discarded bedding, footprints and feeding activity were found across the site.

At the time, planning permission had been granted for a redevelopment of the site and a licence to temporarily exclude badgers from the setts for the duration of construction was obtained from Natural England. This was subsequently withdrawn on the basis that access permission could not be obtained for applying gates and proofing to the two tunnels on the adjacent property so that badgers could not be effectively excluded.

¹ Epoch Ecology (2021) 29 Seabourne Road, Bexhill-on-Sea, Preliminary Ecological Appraisal. Ref EE-21-06050-01.

² Epoch Ecology (2021) 29 Seabourne Road, Bexhill-on-Sea, Reptile Survey. Ref EE-21-06050-02

³ Epoch Ecology (2021) 29 Seabourne Road, Bexhill-on-Sea, Mitigation Strategy Badgers, and Mitigation Strategy Reptiles. Ref EE-21-06050-05



Epoch Ecology became involved in June 2021 and these findings were updated, together with a reptile presence/absence survey which found a peak count of 17 slow worm *Anguis fragilis*. A ground-penetrating radar (GPR) survey was commissioned to gain a better understanding of the distribution and extent of underground burrows of the badger setts. This was combined with extensive vegetation clearance under a watching brief by the ecologist to prevent harm to reptiles and nesting birds. However, due to other ground anomalies such as buried bricks and rubble the GPR failed to provide enough mapping information to provide a mitigation strategy based on physically avoiding the sett.

Our site visit on 8th March 2022 confirmed the previous findings with a similar layout of active entrances within the site boundary, and two entrances situated in the neighbouring property at No 2 Bishop's Walk connected by tunnels into the site. One tunnel appeared to extend underneath the southern boundary wall and underneath another neighbouring property, No 4 Bishop's Walk. The annex sett also remains active.

In the absence of mitigation, the proposed development would remove the annex sett completely and construction activities would risk damage to the main sett and cause disturbance and/or risk of harm to the badgers while occupying the sett. Mitigation is obviously required to prevent harm to badgers and comply with the Protection of Badgers Act (1992) for the development to proceed, and some action is also likely to be required to prevent structural damage to neighbouring properties whether the development goes ahead or not.

3 MITIGATION STRATEGY

3.1 Current Mitigation Strategy

The mitigation strategy proposed by Epoch Ecology involved the establishment of a no-dig exclusion zone over the main sett extending up to 12m radius from each entrance. This is designed to protect the badger sett architecture as far as practicable within the constraints presented at this site. As a precaution, the badgers would be temporarily excluded from the main sett for the duration of construction. Badgers will be permanently excluded from the annex sett at the same time. Once the construction is complete and there are no longer risks of harm to badgers, access to the main sett would be reinstated and badgers allowed to re-occupy the sett.

In the long term, the main sett would be retained in-situ within a 5m wide exclusion zone at the northern end of the plot. Access to the sett would be maintained for badgers by providing a corridor along the western boundary of the site and providing access for foraging badgers into the residential gardens of the new properties.

The problem with this strategy is that once excluded from the main sett, the displaced badgers would have no alternative place of shelter and are likely to establish new setts elsewhere. This could lead to significant management problems within the active construction site, and a high risk of damage to neighbouring properties by displaced badgers. In the long term, the risk of structural damage to the new properties and neighbours remains the same once the development has been completed.



3.2 Proposed Alternative Mitigation Strategy

Badgers

Rother District Council have deferred the decision on the current application while alternative options have been considered. One option explored by the council involves relocation of badgers to an off-site receptor site. Natural England were consulted by the council on this approach in February 2022 and they advised that it would be highly unlikely that Natural England would be able to licence trapping and translocating badgers outside of their social group territory due to disease risk implications⁴. The capture of badgers is a challenging task requiring highly specialised team with appropriate government approved training and veterinary experience, it is usually only approved for badger vaccination or disease control in relation to agriculture. Secondly, it would be difficult to find a suitable receptor site that contains suitable habitat to support them and is not already occupied, and a willing landowner prepared to accept them.

The proposed solution put forward by the Ecology Co-op involves the creation of an artificial sett on the north-east corner of the site and then permanently excluding badgers from both the main and annex setts under licence. This approach will enable permanent underground badger proofing to be installed around the site boundary and development site to prevent badgers from excavating tunnels under neighbouring properties. The proofing works would be completed in two stages, with that in the northeast corner installed before the artificial sett, and then around the area of the main sett once the badgers have been excluded and have established into the artificial sett.

This is a standard approach to badger mitigation that Natural England routinely licence, provided that the methods adhere to best practice guidance, carried out successfully by The Ecology Co-op on other projects. The proposed 5m buffer zone along the northern section of the site would be retained as set out in the original proposal, together with a corridor for badgers along the western boundary so that badgers can disperse for foraging over their home territory as before the scheme.

This strategy does rely on the full co-operation of the neighbouring homeowners to permit ecologists to install one-way badger gates on the main sett entrances and subsequently carry out excavation works to the main sett once badger have been excluded. However, ultimately this approach will be beneficial to them in the long term by preventing badgers from extending the sett under their property, whilst still ensuring that the badgers are able to continue to exhibit their natural behaviour and remain safe at the site.

Slow worms

The translocation of slow worms to an off-site receptor site is feasible but relies on a suitable receptor site being found nearby. The nearest potentially suitable semi-natural habitat, known as Glyne Gap, lies 750m away to the south-east, comprising coastal grazing marsh. A receptor site could be created here for the off-site translocation of slow worms by agreement with the landowner for habitat enhancements. There is also a small area of public greenspace which lies 70m to the east of the

⁴ Email response dated 25th February 2022 from Toni Olsen (Natural England) to Edwin Corke (Rother DC), as provided to the Ecology Co-op by the client.



development site. This comprises amenity grassland and parkland and is currently unsuitable but, by agreement with the site manager and local authority, suitable habitat for slow worms could be created here by changing the management regime and adding log piles and hibernacula. However, it is our opinion that the effort required to secure a suitable off-site receptor site is disproportionate to the scale of impact, and that the population can be adequately safeguarded by the on-site mitigation already proposed, provided that it is timed after badger mitigation.

3.3 Outline of Mitigation Methods

Licensing

An application to Natural England will be made for a 'licence to interfere with a badger sett for the purpose of development'. Note that a decision notice with full planning permission and evidence that all relevant conditions have been discharged, will be required before Natural England can accept a license. Natural England will only issue licences for badger exclusion works between July and November inclusively, excepting special circumstances. This is to avoid disturbance during the sensitive breeding and winter periods. The construction of an artificial sett is not licensable provided that the existing badgers setts are not affected.

The license application will include a detailed method statement setting out precisely the procedures for set exclusion, materials, and sequence of the mitigation proposals. These will form the basis of licence conditions as approved and are outlined below and illustrated in Figure 1.

Step 1: Proofing around the location of the artificial sett.

The artificial sett will be positioned in the north-east corner of the application site. This is away from neighbouring buildings and the existing main sett so the risk of damaging the sett architecture or disturbing badgers is minimised. Prior to construction of the artificial sett a trench will be excavated just inside the site boundary and galvanised chain-link fence will be buried to a depth of 2m. This will provide an underground barrier and prevent digging activity by badgers from extending beneath the adjacent properties.

Step 2: Construction of the artificial sett.

The artificial sett shall be created approximately three months in advance of the main sett exclusion works to allow time for badgers to find and acclimatise to the new sett. It will be located in the north-eastern corner of the site approximately 10m away from the existing sett and carefully constructed so that the original sett is not disturbed. The artificial sett will be formed of 300mm diameter flexible plastic drainage pipe set into the ground and connecting at least four nest chambers with a minimum of five entrances at ground level. Nest chambers are constructed using untreated wooden stakes driven into the ground to form the walls and a sheet of marine plyboard placed on top. No nails or screws should be used so that there not sharp points exposed as the material rots down. Some tunnels will be 'blind ended' (terminated with bare soil) so that badgers may extend the artificial sett through their own natural digging instinct. The whole structure is buried under a mound of soil and allowed to settle (with some topping up as necessary) before entrances are opened to allow entry by badgers. The chambers should be at least 1m below ground level and entrances should be positioned at different heights to improve ventilation. An indicative layout for an artificial sett is presented in Figure 2.



Figure 1. An aerial image showing the location of the site. The approximate site boundary is outlined in red, and the approximate locations of the existing setts (green) and the proposed mitigation steps overlaid (blue). Image produced courtesy of Google maps (map data ©2022 Google)

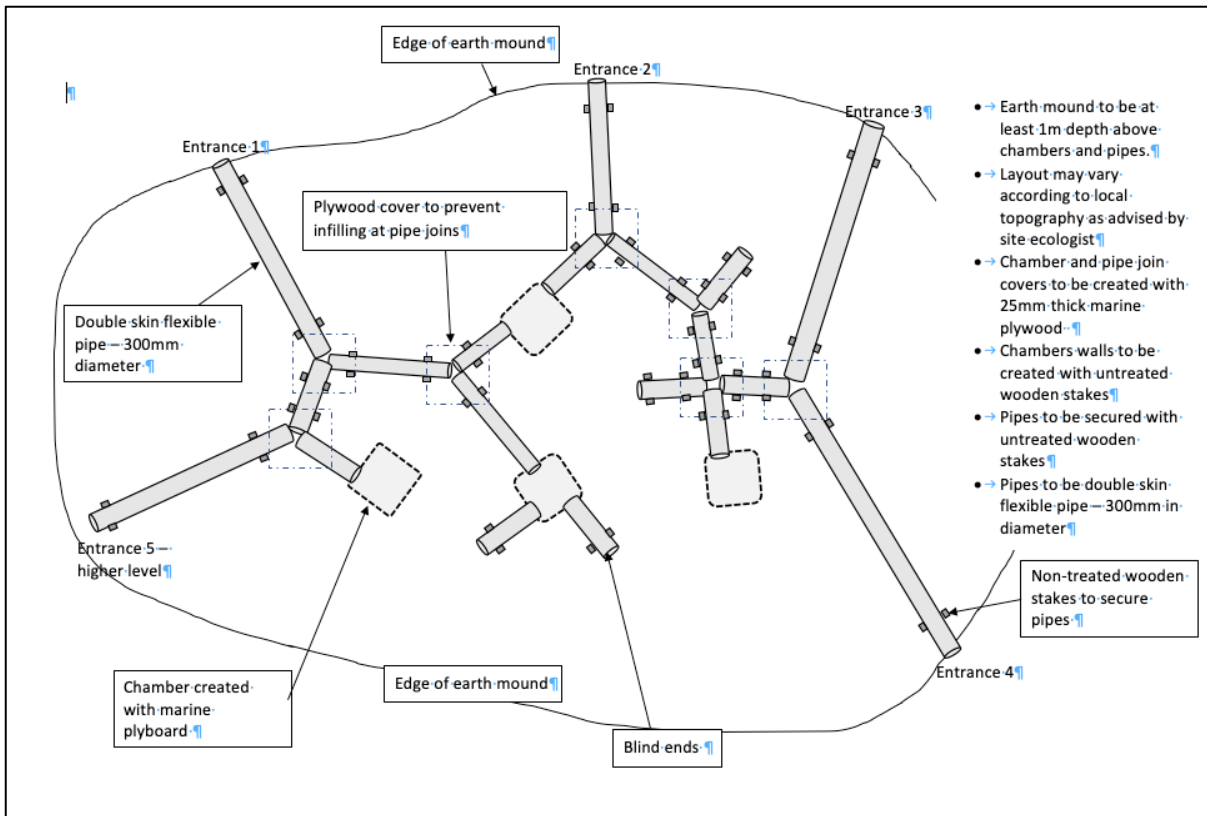


Figure 2. Indicative layout and specifications for an Artificial Sett. The actual design and size of the artificial sett for this scheme may vary to match as closely as possible to the existing main sett, but all construction materials of tunnels and nest chambers are as shown. Image prepared by The Ecology Co-op.

Step 3: Exclusion of badgers and removal of existing setts

This step can only commence once a licence has been granted by Natural England. The actions required to permanently exclude badgers from the existing sett are set out below. These steps follow best practice guidelines from Natural England⁵:

1. The main sett and surrounding area will remain undisturbed before and during the sett closure process. Sett closure will only be undertaken between July and November, in accordance with best practice.
2. The artificial sett entrances will be opened to allow free movement of badgers. Acclimatisation of badgers from the main sett will be encouraged by placing a trail of fresh peanuts between the existing setts and the artificial sett just before sunset (to reduce risk of birds eating them) for a period of 10 consecutive days in advance of sett closure.
3. Standard badger gates⁶ will be installed on all entrances to the sett. It may be necessary to adjust the sett entrances by hand digging with a spade to ensure that the gates are set at the correct angle for the door to swing freely and sit flush with the entrance. Heavy duty chain-link fencing will be fixed to the sides of the gates using metal cable ties, and anchored to the ground

⁵ Natural England Standing Advice on Badger surveys and mitigation. <https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects> [accessed on 21 July 2017]

⁶ Natural England Technical Information Note TN025 (2007) *Using one-way gates on badger set entrances*. <http://adlib.everysite.co.uk/resources/000/109/906/TIN025.pdf> [accessed on 21 July 2017].



- using metal pins, taking care not to penetrate any existing tunnels.
4. The badger gates and area around the sett entrances will be sealed to a radius of approximately 3m using heavy-duty (minimum 2.5mm galvanised wire) chain link fencing, fixed to the ground using metal pegs (using steel pins no longer than 300mm to minimise risk to badgers resting underground). Joints between rolls of chain-link will be sealed using heavy duty cable ties at no more than 300mm spacing.
 5. All vegetation will be cut back as necessary in advance to achieve this and chain-link will be fixed neatly around the bases of large trees to ensure there are no opportunities for badgers to gain entry to the sett.
 6. The gates will be set to automatically shut for a minimum period of 21 days. During this time, the sett will be monitored by a visiting ecologist at least once every three days. The movement of badgers out of the sett will be detected using a combination of sand traps to detect footprints, and by attaching a small thread between the door and frame, which will be broken or dislodged if the door is opened. Activity within the sett will be detected by placing small sticks into the sett entrances behind the doors, which would be dislodged by any moving animals in them. Camera traps may be used if there is any uncertainty.
 7. Following the minimum 21 days exclusion period, if monitoring has demonstrated beyond reasonable doubt that there are no animals remaining in the sett, all badger gates and chain-link mesh will be removed. On the same day, the sett will be carefully excavated by mini excavator, working progressively from the western end of the sett under the direction of the named ecologist, who will ensure that every burrow is followed to its terminal point and make a photographic record of the chambers and layout. No more badger gates and chain-link will be removed at any one time that cannot be excavated in one full day, and the working front will be proofed against badger excavation each evening to prevent re-occupation of the sett. The process will permanently destroy the sett to its full extent and ensure that badgers are not able to re-enter.

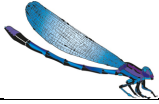
Step 4: Proofing around the former main sett and western boundary

Once the original sett has been removed, the eastern boundary and remaining part of the northern boundary will be proofed against further badger digging activity in the same way as step 1.

Step 5: Landscaping and reptile mitigation

The 5m buffer zone including the area of the former main sett will be landscaped sensitively to provide suitable habitat for badgers and slow worms. This includes the corridor of undeveloped land along the western boundary will be established as shown in the original mitigation proposals as submitted. The proposed development site will then be subject to a 'destructive search', during which all vegetation will be cleared using hand tools, the remaining parts of the derelict bungalow and rubble will be cleared with the aid of an excavator, and an ecologist on site to supervise and capture slow worms as they are exposed.

The timing of reptile mitigation is dependent on the successful implementation of licenced badger mitigation and is very weather dependant. If the badgers can be successfully relocated before mid-September, then provided the weather remains suitably mild, and the receptor site is adequately established, then it may be possible to complete destructive searches before the onset of hibernation. If this is not possible, the destructive searches may have to take place in spring.



4 Mitigation Schedule

Activity	Proposed timing	Comments
Step 1 Proofing eastern boundary	June 2022	
Construction of Artificial Sett	June 2022	In conjunction with step 1
Artificial Sett Acclimatisation period	July-August 2022	Setting peanut trails between existing setts and the artificial Sett
Licence application and consultation with Natural England	Submit application in June 2022. Decision in mid-July 2022.	Application can only be submitted once full planning permission has been granted. Consultation period at Natural England takes at least 30 working days
Install badger gates and chain-link mesh	September 2022	If any new active entrances are encountered within the construction zone behind Building 2, it is assumed these will also be covered under the licence automatically
Badger exclusion period (minimum 21 days) with monitoring checks every third working day	September – October 2022	If there is any evidence that badgers remain, this period will be extended.
Removal of equipment and excavation of sett.	October – November 2022	Could be delayed - Sett excavation will only take place when it is certain beyond reasonable doubt that badgers are successfully excluded.
Landscaping northern buffer zone	October- November 2022 and March-April 2023	Dependant on above, tree and shrub planting may take place during winter. Grass seeding in either autumn or spring.
Destructive searches for reptiles and site clearance works	September 2022 or April-May 2023	Only permitted in suitably warm weather conditions avoiding the hibernation period. Can only be commenced once suitable established receptor site is available
Commencement of construction	October – November 2022 or May 2023	Once ecologist is satisfied beyond reasonable doubt that no protected species are present in the construction zone.