

PRELIMINARY ECOLOGICAL ASSESSMENT

DINAH'S HOLLOW

MELBURY ABBAS

DORSET

7<sup>TH</sup> NOVEMBER 2022

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FOR

DORSET COUNCIL

HIGHWAYS



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# 1. Introduction

## 1.1 Background

Dinha's Hollow, is located in the village of Melbury Abbas, Shaftesbury, Dorset. Grid reference ST 88270, 20518. A preliminary ecological assessment is required to identify ecological interests including the likely protected and priority species and habitats for this location. This is to inform the scheme proposal for the stabilisation of the slopes in respect of highway safety. Previous ecological survey work was undertaken in 2014-15 although due to the time elapsed since, an updated assessment will be required. The extent of the current proposal affects just the slopes shown within Figure 1 whereas previously the slopes to the south below St Thomas's Church also formed part of the scheme.

## 1.2 Description

Dinah's Hollow is an ancient steep-sided Holloway which originally was part of the main route between Shaftesbury and Blandford. The first Turnpike Trust responsible for the upkeep of the coaching routes in Dorset established in 1752 has reference to the hollow (Good 1940). The significance of Holloway's in the north Dorset landscape has been identified by the Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty within the Landscape Character Assessment of the area. Within Type 1: Chalk Escarpments; 'hanging woodland and sunken lanes are features of the steep, enclosing chalk combes' which characterise the Melbury to Blandford section. The soils at Dinah's Hollow are greensand rather than clay with flint which is more typical of the chalk landscape.' (CC&WW AONB 2003) The hollow is currently wooded with a mix of tree species with Sycamore *Acer pseudoplatanus*, Holly *Ilex aquifolium*, Pedunculate Oak *Quercus robur*, Ash *Fraxinus excelsior*, Hawthorn *Crataegus monogyna*, Field Maple *Acer campestre*, Beech *Fagus sylvatica*, Scots Pine *Pinus sylvestris* and Hazel *Corylus avellana*. The woodland has several vascular plant species associated with ancient woodland suggesting it has been wooded for several hundred years. The wooded slopes adjoin a cultivated agricultural field on the eastern side and pasture and a vineyard on the western side. The hollow and highway sit within the Cranborne Chase and West Wiltshire AONB. The woodlands are not designated as ancient woodland although

there are species which indicate continuity of semi-natural vegetation cover and tree management including coppicing which occurred many decades ago.

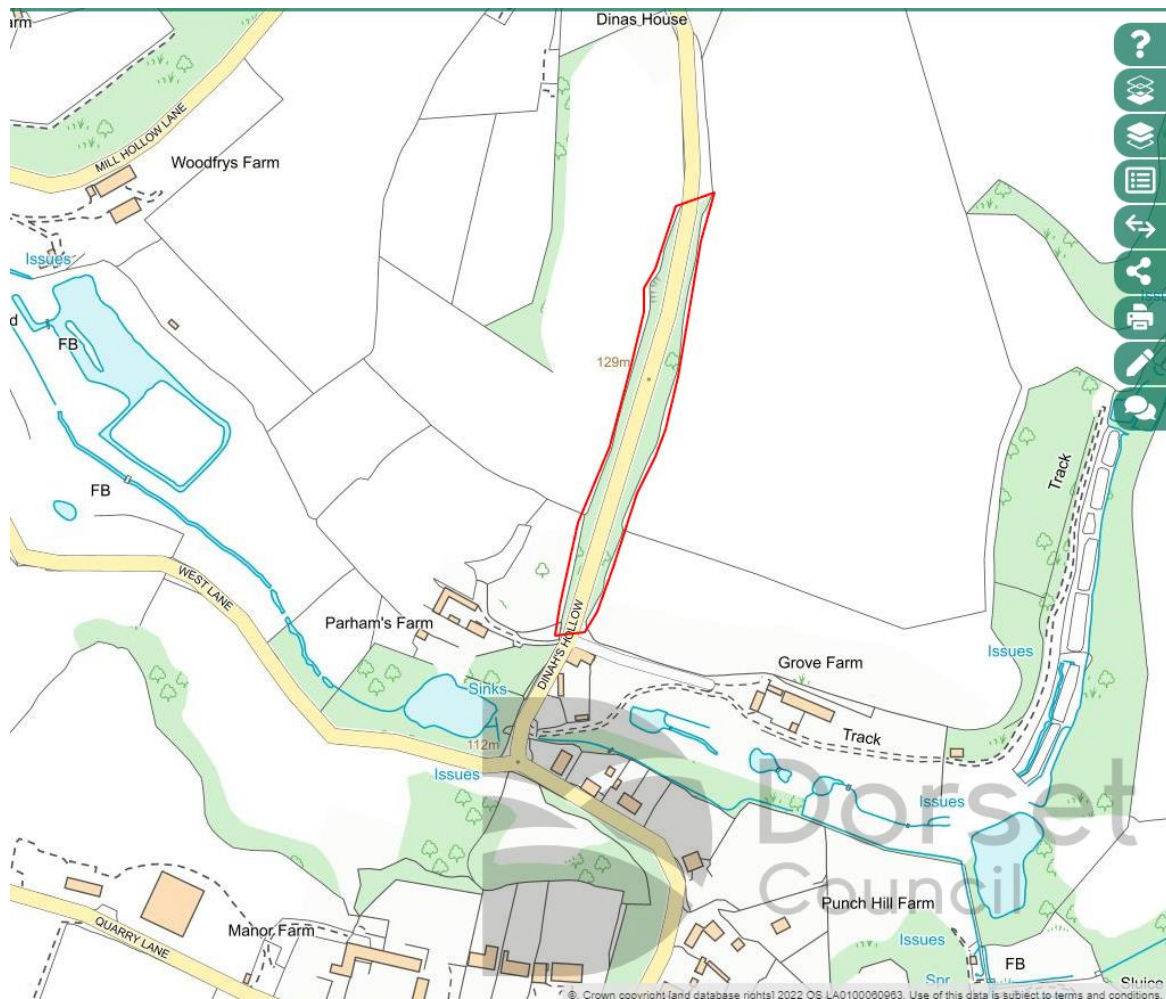


Figure 1. Location of Dinah's Hollow and extent of the area subject to survey within red-line.

### 1.3 Aims & Objectives

The aim of this preliminary ecological assessment is to provide an updated baseline of information on the presence or likely presence of protected and priority species and habitats. In particular the objectives/outputs are to;

1. Identify protected and priority species interests and their relative locations/distributions and screen out those unlikely to be found here.
2. Identify protected and priority habitats and those habitat features which may provide habitats for other species which may be protected and priority.

3. To recommend further surveys for protected and priority species which must be carried out within the appropriate season and for the required duration to ensure a reasonable assessment of presence/absence and impact assessment can be made (See 7).
4. To review and where appropriate, integrate data from tree and landscape assessments when considering effects, impacts and mitigation. \*
5. To undertake a preliminary desk-top study of ecological records from Dorset Environmental Records Centre (DERC) for the Hollow and up to 2km around the site to consider its context and proximity to other protected landscapes, their character, habitats and species. \*
6. To evaluate the potential zone of influence of the scheme upon each of the habitats and species groups and consider any cumulative impacts from developments in addition to this scheme. \*
7. To inform the background survey work required for a full ecological impact assessment EcIA of the scheme. This will be the appropriate document which considers the impacts of the scheme and evaluates the mitigation hierarchy against the impacts and proposes the necessary measures that must be adopted. Once details of the engineering works are available a full ecological impact assessment (EcIA) will be used to inform and influence the design and methods to mitigate harm to habitats and species identified above. This will follow the mitigation hierarchy to **Avoid** by changing plans/work to avoid harm: **Mitigate** to reduce the impact to a level which does not affect a species/habitat e.g., by timing work to avoid sensitive periods or excluding species temporarily: **Compensate** to address any residual loss of habitat e.g., by creating like for like on site or away from site replacement habitat which can be secured into the future: **Enhancement** which involves provision of additionality leading to a net gain for biodiversity e.g., additional habitat creation which is measurable to achieve compliance with the biodiversity metric.

\*NB; Those objectives/outputs marked with an asterisk will be fully evaluated within a detailed Ecological Impact Assessment once detailed surveys have been completed. They are included here for completeness and as a reminder for the scope of the surveys required.

However, the results and discussion from this report can be carried forward into the full EcIA where appropriate.

## 2. Methods

### 2.1 Introduction to Methods

A daytime walkover survey was carried out across the area shown in Figure 1, on 21<sup>st</sup> September 2022 during dry and bright weather. This preliminary appraisal of ecological interests provided a rapid assessment and followed industry guidance (CIEEM 2017). The main interests for consideration are listed below in 2.2 Species and 2.3 Habitats; the numbers in superscript are references to the relevant legislation as listed in Box 1 below. This lists the relevant legal protection and policies related to biodiversity and best practice guidance. Consideration of a wider zone of influence will need to be made through desk-top study of ecological records and previous data. The species and habitat interests will be dealt with in the results and discussion sections. This will provide an evaluation of likely presence and recommendation for further surveys required where there are knowledge gaps. A preliminary assessment of existing environmental records from DERC is incorporated into each section and as a stand-alone section to provide context and guide further survey recommendations.

### 2.2 Species

#### 2.2.1 Plants & Fungi

Vascular plants; red-data species and those protected from uprooting, destruction <sup>1</sup>

Fungi: red data species and those protected from uprooting, destruction <sup>1</sup>

#### 2.2.2 Protected Mammals

Dormouse: protected from killing, injury, destruction of breeding and resting place <sup>1 & 2</sup>

Bats (all species): protected from killing, injury, destruction of breeding and resting place <sup>1 & 2</sup>

Badger: Protected from killing injury and destruction, damage, disturbance to setts <sup>3</sup>

### 2.2.3 Birds

All wild birds and their nests, eggs and young from killing, damage, destruction with some special protection which includes disturbance to nesting during the breeding season <sup>1 & 4</sup>

### 2.2.4 Reptiles & Amphibians

All common protected reptiles, grass snake *Natrix natrix*, common lizard *Zootoca vivipara*, slow worm *Anguis fragilis*, Adder *Vipera berus* from killing and injury <sup>1</sup>.

Great Crested Newt: from killing, injury, damage, destruction and disturbance to breeding and resting place <sup>1 & 2</sup>

### 2.2.5 Invertebrates

Red-listed species and priority species and those listed as protected from killing and taking <sup>1</sup>

## 2.3 Habitats

Lowland mixed deciduous woodland: aligns with a priority habitat listing <sup>5</sup> and sits within an existing and potential habitat network.

Freshwater: potential habitat for protected and priority species e.g., Great Crested Newt (GCN) which may use the woodland on the slopes as terrestrial habitat outside of the breeding season.

**Box 1** Summary of the legislation and policy relevant to the species and habitats likely to be found at Dinah's Hollow

LEGISLATION

<sup>1</sup> WCA (Wildlife & Countryside Act 1981 (as amended)

<sup>2</sup> EPS (European Protected Species) EPS are protected under the Conservation of Habitats and Species Regulations 2017

<sup>3</sup> Protection of Badgers Act 1992

<sup>4</sup> WCA schedule 1 disturbance of certain species of nesting birds

<sup>5</sup> NERC (Natural Environment & Rural Communities Act 2006) s41 species & habitats of principal Importance

NB: Several species afforded protection referred to and several which are not, are listed under NERC (2006) as species of principal importance which is relevant to public bodies to help them meet their 'biodiversity duty', to be aware of biodiversity conservation in their policy or decision making.

NATIONAL PLANNING POLICY

National Planning Policy Framework (2021) 15. Conserving and enhancing the natural environment.

BRITISH STANDARDS

BS 42020: 2013 Biodiversity. Code of practice for planning and development

BS 8596: 2015 Surveying for bats in trees and Woodlands – Guide

BS 8683: 2021 Process for designing and implementing Biodiversity Net Gain.

POTENTIAL HABITAT NETWORK

Position within the Dorset Local Nature Partnership Habitat Network

CRANBORNE CHASE & WEST WILTSHIRE AONB

Landscape Character Assessment and AONB Management Plan

### 3. Results

#### 3.1 Habitat

3.1.1 Lowland mixed woodland: the wooded slopes represent a small area of native broadleaf and mixed woodland which would potentially sit within the Lowland mixed broadleaf woodland habitat of principal importance. The woodland is known from existing records (DERC) to have several species which are indicators of ancient semi-natural woodland (AWI) in Dorset including Dog's Mercury *Mercurialis perennis*, Bluebell *Hyacinthodes non-scripta* and Moschatel *Adoxa moschatellina*. King (2014) identified six AWI although only Dog's Mercury was found at this survey but autumn is far from ideal as many vascular plants will have died back and been difficult to find. There was evidence of historical coppicing as several trees and shrubs were multi-stemmed although mature. The 1947 aerial photo indicates the trees being smaller and the canopy more open as the highway is visible compared to the most recent aerial of 2021, (Figure 2) a 1947 and b 2021 although the extent of woodland is similar. The trees are a mix of mature specimens with a closed canopy which interlinks across the highway. There are several notable trees including Oaks on both slopes, and two multi-stemmed Field Maples and two large multi-stemmed Ash trees along the top of the eastern slope and a single Lime *Tilia spp.* There are several mature Ash and Sycamore on the western slopes and a tall Scots Pine. There are pockets of understorey where the canopy is open with Bramble *Rubus fruticosus*, Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna* and Hazel coppice stools all of which were mature. There are several mature multi-stemmed Field Maples on the western slope at the top as the highway leads towards the top of the incline. The woodland sits within an existing ecological network which are established to promote extensive linkages of habitats in England to act as corridors and stepping stones for nature (Dorset Local Nature Partnership 2020). The woodland within the Holloway was deemed important for several species of bats and a Buzzard *Buteo buteo* nest was identified in the tall Scot's Pine tree. The significance of holloways in the north Dorset landscape has been identified by the Cranborne Chase and West Wiltshire Downs AONB as noted in the introduction.

There are several freshwater ponds within the potential zone of influence which are a consideration because of the potential to support Great Crested Newt, (see 3.5).



Figure 2. Aerial photos from a) 1947 left and b) 2021 right. Photographs from Dorset Explorer.

A review of DERC records for statutory and non-statutory designated habitats identified the following: There are no statutory sites designated within the immediate area of Dinah's Hollow other than the Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty. The nearest nationally and internationally designations are respectively, the site of special scientific interest (SSSI) and special protection area (SAC) covering Fontmell and Melbury Downs approximately 440 metres to the south-west. Designated for its limestone species. The nearest non-statutory site of nature conservation interest (SNCI) is a neutral grassland habitat at Melbury Abbas c.270 metres east and not within Dinah's Hollow.

### 3.2 Plants and Fungi

As referred to in 3.1 there were previously recorded species indicative of ancient woodland although the Holloway is not registered as such. There were several ferns noted including Hart's-tongue *Asplenium scolopendrium* and Scaly Male fern *Dryopteris affinis*. Only a single *Ganoderma spp.* a bracket fungus was found which was growing on a Hazel shrub. Six plants are Dorset Notables (DERC records 2014) and several are ancient woodland indicators as noted in 3.1. Bluebell as well as an ancient woodland indicator and Dorset Notable is a priority species under NERC 2006.

### 3.3 Protected Mammals

While no evidence or signs were identified during the survey, the woodland on both slopes does provide suitable habitat for Dormouse *Muscardinus avellanarius*. This species was not found during survey work in 2015. The nearest record is at Compton Abbas 2km away.

Bats are known from the area, (King 2014) following previous surveys the hollow is known to be used by several species. A number of the trees were noted during the current preliminary survey to have high potential roost features including a mature Oak on the western slope (Figure 3) with a Great Spotted Woodpecker hole. There were several trees across the area of both slopes with potential roost features. Bats will use a range of cavities, splits and lifting bark in which to roost (BTHK 2020). There is one roost record within buildings within 250m and 7 roost records within 1km of Dinah's Hollow. Four species have been identified through acoustic detection in 2018; serotine *Eptesicus serotinus*, common pipistrelle *Pipistrellus pipistrellus*, Long-eared *Plecotis spp.*, and noctule *Nyctalus noctula*. There are records beyond the immediate site from more than 1km away for Barbastelle *Barbastellus barbastella*, Natterer's bat *Myotis nattereri*, soprano pipistrelle *Pipistrellus pygmaeus*.

There was evidence of Badger *Meles meles*, using the Holloway with several well-worn paths seen on the western slope. There was a single hole outlying sett on the top of the western slope and another part way down the slope approximately 30 metres down from the upper traffic lights. Another single-holed sett was found near top of slope above the Pine and traffic lights. On the upper part of the western slope beyond the upper traffic lights where a 5-hole

sett was inactive with no signs of recent use. This had been very active during surveys in 2015 (Own observation) and included in the DERC records.

### 3.4 Birds

The site is known to be used by Buzzard as a large nest is present in the tall Scot's pine. There was a large oak tree with a recently excavated Great Spotted woodpecker *Dendrocopus major*, hole. The woodland is likely to provide nesting opportunities for a range of woodland birds particularly species associated with mature trees such as Nuthatch *Sitta europaea* and Treecreeper *Certhia familiaris*. There is a DERC record nearby of the red-listed Spotted flycatcher *Muscicapa striata* which uses woodland and woodland edges.

### 3.5 Reptiles & Amphibians

The woodland on the slopes is likely to provide refuges for amphibians but unlikely to offer breeding habitat as there is no water body within the wooded slopes. Reptiles prefer habitats which are more open and sunnier in which to bask and forage for invertebrate prey. A previous survey for Great Crested Newt (GCN) *Triturus cristatus* in 2015 did not find any evidence of breeding in the nearest waterway at Parham's Farm. However, part of the Holloway sits within the Amber risk zone for this species in Dorset which contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal (NE 2021). There is a DERC record from Cann for slow worm *Anguis fragilis* and grass snake *Natrix natrix helvetica*, but none were recorded at Dinah's Hollow.

### 3.6 Invertebrates

The slopes are likely to be used by woodland invertebrates although with a closed canopy these are likely to be associated with fallen deadwood, leaf-litter and tree leaf-foliage. The previous survey did not identify any protected or priority species e.g., woodland butterflies.

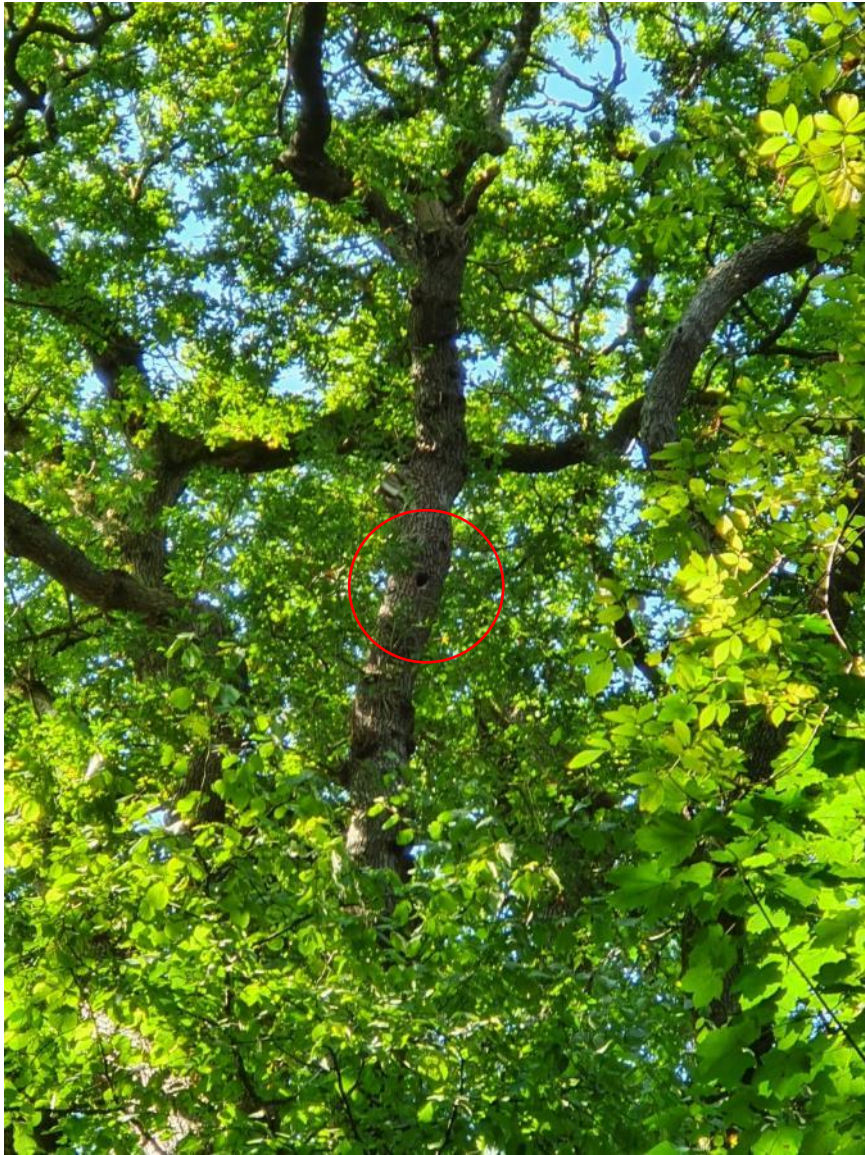


Figure 3. Mature Oak on the western slope with a woodpecker hole which is a potential bat roost feature.

## 4. Discussion & Recommendations

### 4.1 Introduction

This section provides an assessment of the results with recommendations for future surveys and further work to complete a detailed ecological impact assessment (EcIA). The timeline of which are summarised in a Gantt Chart giving guidance on the timing & duration of each, (Table 1). The level of survey effort should be proportionate to the likely impact and targeted to those areas affected. A key consideration for further surveys will be to determine whether a mitigation licence will be required for each of the protected species. Therefore, it is important that the survey effort is sufficient to inform licensing requirements as failure to do so could mean a licence application to Natural England being refused leading to delays to the scheme. At this stage the full extent of the stabilisation and its timing is unknown and similarly it is not known which trees are to be removed or require arboricultural pruning to be carried out. The species survey methods proposed therefore cover those typically required to make a complete assessment. Once the arboriculture data is available the trees/locations affected can be considered specifically. Similarly, a landscape appraisal may identify landscape characteristics that require consideration in respect of developing a mitigation strategy for the hollow. Once all the relevant surveys are complete, it is likely that an integrated landscape and ecology management plan (LEMP) will be required which draws together the recommendations from ecology, landscape and arboriculture reports under one document. The full ecological impact assessment will need to consider the risks to protected and priority species during construction as well as the long-term risks or effects afterwards. This is particularly important where the magnitude of change is likely to significantly affect the conservation status of a species or alter conditions of the existing habitat.

### 4.2 Main Recommendations

There will be a requirement for further species-specific surveys because the previous survey data is now at least seven years old. Survey data beyond two years cannot be relied upon to provide reasonable certainty (CIEEM 2019). Additionally, the data for the most recent ecological records from Dorset Environmental Records Centre will need to be more fully considered to inform these surveys and to produce a comprehensive ecological impact assessment. Each of the habitats and protected species interests are considered below.

#### 4.3 Habitats, Plants & Fungi

Consideration of habitat type is necessary when forming mitigation plans which should accord with the broad-leaf woodland habitat identified at Dinah's Hollow. The presence of semi-natural broadleaved and mixed woodland is recognised within the existing ecological network which identified the Hollow as an important element within the wider habitat network in north Dorset (Dorset Local Nature Partnership 2020). As such the way the Hollow is managed and modified should reflect the woodland character and also align with the CC & WW AONB landscape character assessment (2003) as a sensitive receptor both visually and ecologically. An assessment of the floristic and fungi interest should be carried out by a competent botanist in the spring period (April-May) as a repeat of the previous plant survey by Dr A. King in 2014, and autumn period for fungi. This is because there were several species of plants identified which are notable in Dorset and indicators of ancient woodland. One of these, Bluebell, is a priority plant species under the NERC Act (2006) requiring conservation measures where it is found. At the same time as the plant survey is carried out an assessment of notable or veteran trees should be undertaken. The woodland is covered under a Tree Preservation Order (TPO) and consultation with the Arboriculture Officer at Dorset Council is recommended and Landscape Officer to agree mitigation work required.

#### 4.4 Protected & Priority Species

##### 4.4.1 Bats

It will be necessary to undertake an assessment of the potential bat roosts in trees (Collins 2016) across the hollow. Bats are sensitive to disturbance and tree felling can destroy and remove potential roosts. The survey requires an ecologist to carry out a walkover assessment during winter time when there are no leaves obscuring branches and stems, to locate and map potential roost features (PRF). This will identify trees that require further assessment, i.e., those trees likely to be removed or trees requiring crown reduction. PRF's identified can be inspected using a torch and endoscope by either a climbing survey or access using a mobile elevating work platform to inspect cavities, woodpecker holes etc. Where trees cannot be accessed or there is doubt over locating PRF's then a further/alternative assessment should be considered which incorporates either a dawn return survey to watch bats returning to a

PRF or using thermal imaging camera to see whether bats emerge or return to a tree roost at night. This can be involved and specialist work and would require a road closure as would the climbing survey and, ideally, the walk over survey too. Where roosts have been identified that are likely to be lost or significantly damaged/ disturbed then an EPS licence from Natural England will be required.

#### 4.4.2 Dormice

A Dormouse assessment is required because of the potential for harm through tree and understorey vegetation removal affecting potential nests and engineering work to stabilise the slopes which affect potential underground hibernation nests. Dormouse surveys will be required which include siting of nest tubes along both slopes in trees and shrubs. These must be set out and monitored monthly for uptake by Dormice for making a judgement on assumed absence. Following the calculations in the Dormouse Conservation Handbook, the survey effort should be based on a probability score of not less than 20 (Bright et al. 2006). This will require survey effort across the months April to November using 50 nest tubes. Additional methods may be used including footprint tunnels which have been shown to be effective at detecting the presence of Dormouse (Bullion et al. 2018). A survey effort of 50 footprint tunnels set out for 3 months and inspected 6 times during the summer (May-August), which is the period when Dormouse activity is high. It can continue into the autumn months (September-October) if preceding months fail to detect Dormouse to give 95% probability of detection if present (See Bullion et al. 2019). As an EPS, mitigation must be considered if Dormice are found to be present which may also require a mitigation licence from Natural England.

#### 4.4.3 Badgers

There was evidence of badger activity across both the slopes but especially noted were several outlying setts and the disused subsidiary sett. These are likely to be within a home-range of a badger social group and could become active at any time. As such they must be monitored in advance of the proposed works to establish whether or not a sett becomes active in or close to the area of slopes likely to be affected by stabilisation work. Licensing to undertake sett closure was considered necessary during the 2014-15 survey. The aim was not

to completely exclude badgers but to focus on those areas subject to stabilisation work. Retaining areas within which badgers can continue to live in setts will be important rather than pushing them into areas where they may cause damage e.g., in gardens bringing them into conflict. Closure of a main sett can require construction of an alternative sett as compensation. The licensing window for any sett closure is 1<sup>st</sup> July to 30th November. Sufficient lead-in time is required to complete any licensable sett closure prior to any stabilisation works beginning. Similarly where setts are inactive yet fall within the working areas these may also need to be closed well before the work starts as leaving them open presents a risk that they may be occupied by badgers and therefore a licence application will be required which may cause delays.

#### 4.4.4 Birds

It is highly probable that nesting birds will be present within the main breeding period March to August and a mitigation strategy will be required. Both open nesting species e.g., Buzzard and cavity nesting species e.g., Great Spotted Woodpecker were identified which use trees. Avoidance of carrying out vegetation clearance in the breeding season is important as otherwise it runs the risk of destruction of active nests and breaking the WCA 1981. Breeding bird surveys including evening surveys for Tawny Owl *Strix aluco* should be carried out to identify the range of species using the slopes and propose mitigation e.g., additional planting. This is because several species that use woodland habitats are included in the Birds of Conservation Concern and also listed as priority species under s41 NERC Act (2006) e.g., Bullfinch *Pyrrhula pyrrhula*.

#### 4.4.5 Reptiles & Amphibians

It will be necessary to produce a mitigation strategy for both groups which reduces the likelihood of killing or injury. Reptiles are all legally protected under the WCA 1981 which makes it illegal to deliberately kill or harm them. It is unlikely due to the closed canopy that there is a significant reptile population. Detailed surveys are not therefore recommended as they are unlikely to detect animals. Nevertheless, mitigation must be considered and may include phased clearance of vegetation but only where it is possible to retain a significant proportion of suitable habitat nearby into which both reptiles and amphibians can move.

The hollow is part of the Amber zone for Great Crested Newts (GCN) which makes it very important as a potential dispersal area for this species. It will be necessary to consider its presence in breeding ponds by carrying out a repeat of surveys of water bodies within 250 metres of the slopes to establish whether newts are present to help determine the impacts. Alternatively, consideration can be given to adopt mitigation through the GCN District Licensing Scheme where it is likely that the favourable conservation status of GCN would not be maintained and there was a risk of loss of continuing ecological functionality of the terrestrial habitat for newts. Otherwise, a site-specific licence may be required should presence of GCN be identified within a water body within 250 metres of the scheme working area. Guidance from Dorset Council Natural Environment Team will be important.

#### 4.4.6 Invertebrates

An assessment of the invertebrates will require consideration of existing records and potential of finding different priority species here. It is unlikely that thermophilic species (requiring open canopy, warm conditions associated with sunny glades and rides) will be present because the woodland on the slopes is closed canopy. There may be saproxylic species which depend upon dead wood, both fallen and standing, e.g., Beetles. A detailed review of Dorset Environmental Records Centre will be undertaken to help inform a view on the importance of the site for invertebrates and mitigation.

#### 4.5 Conclusion

This assessment has identified several potential protected and priority species which may be affected by the proposed scheme. It identified the need for further survey and assessment for these species and considerations of both impacts during and after construction of the stabilisation. It also recommends the need for integrated approach with Arboricultural and Landscape Officers to agree mitigation and enhancement opportunities. There should be no net loss to biodiversity and gains which can be measurable. A timeframe of surveys and assessment is given and requires details of the programme of stabilisation works to ensure adequate lead-in time is given to finalise these ecology surveys and assessment.

Surveys Required	2023 Month - Duration											
	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Desktop review of existing data												
Vascular Plants & Bryophytes												
Bat Roost Survey -MEWP <sup>1</sup>												
Dormouse Nest & footprint tube <sup>2</sup>												
Great Crested Newt Assessment <sup>3</sup>												
Badger Activity Assessment												
Bat Activity Assessment <sup>4</sup>												
Invertebrate assessment												
Breeding Birds												
Consultation with NET												
Ecological Impact Assessment												

Table 1 GANNT Chart showing ecology work and timing of surveys for those species which must be assessed under an Ecological Impact Assessment. (NE & DEFRA 2022) <sup>1</sup> Surveys required which enable PRFs to be visually checked using torch & endoscope by a licensed ecologist. <sup>2</sup> Setting out nest tubes and follow up monitoring must be done by a licensed ecologist. <sup>3</sup> Survey may be considered unnecessary by evaluating the potential impacts and using the GCN District Licensing if the favourable conservation status of the species is unlikely to be met. <sup>4</sup> This will require assessment at night time and possibly dawn return surveys at those roosts in <sup>1</sup> above which could not be visually inspected.

\* Evening surveys for Tawny Owl which establish breeding territories in the autumn. (Bibby et al. 2000)

## 5. Acknowledgements

Tanya Ruseva kindly provided background details and previous survey data requested from Dorset Environmental Records Centre. Bryan Edwards kindly sent through the historical botanical records from the 1940's which included the hollow.

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## Appendices

Appendix 1 Potential Zones of Influence showing 1km radius outer circle for designated sites and inner circle 250 metre radius in considering Great Crested Newts as the hollow is partly within the Amber risk zone and therefore qualifies for consideration under district licensing.

