



WE KNOW SERVICES

ECOLOGY SURVEY AND ASSESSMENT

ALDERLEY
WATER LANE
TARBOCK GREEN
KNOWSLEY

JULY 2019

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Summary

- This ecological appraisal presents the ecological, biodiversity and nature conservation status of Alderley, Water Lane, Tarbock Green, Knowsley. The appraisal was requested in connection with proposals to construct an extension on the existing dwelling and demolish the garage.
- The results of a desktop study and extended Phase 1 Habitat Survey carried out in June 2019 are presented. The scope of the ecology survey and assessment is appropriate to enable the identification of any potential ecological constraints, the scope of mitigation if required and opportunities to enhance biodiversity at the site.
- The site comprises of mixed trees, introduced shrubs, amenity grassland, buildings and hard standing.
- The proposals will have no adverse direct or indirect effect on statutory or non-statutory designated sites for nature conservation.
- The Hawthorn hedgerows at the site boundaries are priority habitats in accordance with Section 41 of the *NERC Act 2006* and are of local value to wildlife. Recommendations relating to the retention and protection of these habitats are provided at **Section 5.1**. No other habitats within the site are of significant ecological interest in terms of their plant species composition.
- No bats or evidence of bats were detected at the external elevations or internal areas of the buildings. No features suitable for use by roosting bats were identified at the buildings or their surrounds. In addition, none of the trees within the site boundary contain any features suitable for use by roosting bats. As such, presence of roosting bats is reasonably discounted and no further surveys are required.
- Habitats within the site are suitable for foraging and nesting common passerine bird species. Recommendations for the protection of nesting birds and opportunities presented by the proposals to create provision for nesting birds are described at **Section 5.3**. The site does not contain any suitable foraging, nesting or roosting habitat for barn owl.
- The site supports suitable foraging and sheltering habitat for hedgehog (a priority species). However, the proposals will not result in loss of sheltering and foraging habitat for hedgehog and suitable habitat will remain available in the site and the surrounding landscape.
- No other protected species have been detected. Appropriate survey effort and assessment in accordance with standard survey guidance has been carried out to reasonably discount adverse impacts on badger, great crested newt, invertebrates, reptiles and riparian mammals.
- It is considered that the proposals are feasible and acceptable in accordance with ecological considerations, wildlife legislation and relevant planning policy.

1.0 Introduction

1.1 We Know Services were instructed by Mr Darrin Adams to carry out an ecological appraisal of Alderley, Water Lane, Tarbock Green, Knowsley (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SJ 46457 87551. The appraisal was requested in connection with proposals to construct an extension on the existing dwelling and demolish the garage.

1.2 This report details the results of the following ecology surveys and assessments:

- Desktop study to collate known ecology information at the site and local area;
- Extended Phase 1 Habitat Survey;
- Assessment of the ecological value of habitats within the site and its surrounds; and
- Survey and assessment of all habitats for protected and notable species including amphibians, badger (*Meles meles*), bats, birds, invertebrates, reptiles and riparian mammals.

1.3 The information gathered has been used to identify the ecological constraints on the proposals and the scope of mitigation and ecological enhancement required in order to comply with wildlife legislation and planning policy guidance. In addition, details relating to the need for any further surveys or precautionary actions that may be required prior to commencement of site works are provided.

2.0 Survey Methodology

2.1 Desktop Study

2.1.1 The following sources of information were consulted:

- Multi-Agency Geographic Information for the Countryside (MAGIC) at www.natureonthemap.naturalengland.org.uk;
- Natural England at www.gov.uk/government/organisations/natural-england; and
- Knowsley Council at <https://localplanmaps.knowsley.gov.uk/>

2.1.2 The proposals and site are small-scale and will have a limited impact on the local area. Therefore, in accordance with Guidelines for Accessing and Using Biodiversity Data (CIEEM, 2016), it is considered that the purchase of biological data (as provided by Merseyside BioBank) is not required at this stage.

2.2 Plant Species and Habitats

- 2.2.1 An extended Phase 1 Habitat Survey of the site was conducted on the 24th June 2019 by Dr Nicola Wallbank B.Sc (Hons) Ph.D. ACIEEM.
- 2.2.2 A habitat map (**Figure 7.1** at **Appendix 1.0**) was produced for the site based on the methodology as detailed in *Handbook for Phase 1 Habitat Survey: A technique for environmental audit* (JNCC, 2010).
- 2.2.3 Plant species abundance was estimated using the DAFOR system: D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = rare. To describe the species abundance with greater accuracy the terms Locally (L) and Very (V) have been used.
- 2.2.4 A search for invasive species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.3 Fauna

- 2.3.1 The methods applied to establish the presence or potential presence of protected and notable animal species on site and within the immediate surroundings are detailed in **Table 2.1**, below.

Table 2.1: Summary of Protected and Priority Species Survey Methods

Species/Group	Survey Methodology
Badger	The site was inspected for badger activity. The survey area covered the site and extended to accessible land within a 50 metre radius of the site boundary. The survey was conducted in accordance with <i>Badgers: surveys and mitigation for development projects</i> (Natural England, 2015) and involved searching for signs of badger such as setts, footprints, latrines and hairs
Bats	The suitability of all buildings and trees within the site for roosting bats and the value of habitats on and adjacent to site for commuting and foraging bats was assessed in accordance with Table 4.1 of <i>Bat Surveys for Professional Ecologists: Good Practice Guidelines</i> (3 rd edn) (Collins, J. (ed.), 2016)
Birds (Including Barn Owl)	All bird species observed and heard during the habitat survey were recorded and habitats within the site were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value and habitat structure The suitability of the site to support barn owl (<i>Tyto alba</i>) was assessed as indicated by the presence of appropriate nest and/or roost sites such as farm buildings, mature trees, mounted nest boxes as well as favourable foraging habitat in accordance with <i>Barn Owl Tyto alba Methodology and Techniques for use in Ecological Assessment</i> (Shawer, 2001) and <i>Barn Owl Conservation Handbook</i> (Barn Owl Trust, 2012).

Species/Group	Survey Methodology
Great crested newt	In accordance with <i>Great crested newts: surveys and mitigation for development projects</i> (Natural England, 2015) all ponds within an unobstructed 500 metre radius of a site were be considered for their suitability to support breeding great crested newts (<i>Triturus cristatus</i>)
Invertebrates	The site was assessed for its potential to support notable invertebrate assemblages as indicated by the presence of habitat features such as heathland, bogs, mire, ancient woodland, water bodies, floristic diversity and deadwood
Reptiles	The site and its surrounds were assessed in terms of their suitability for use by reptiles species based on their habitat requirements as detailed in the <i>Reptile Habitat Management Handbook</i> (Edgar et al., 2010)
Riparian mammals	There are no watercourses or ditches on site or within the surrounding landscape that have connectivity with the site. Therefore, the presence of riparian mammals is reasonably discounted.
Other wildlife	The site was assessed for its suitability for use by notable species associated with residential properties in rural landscapes such as hedgehog (<i>Erinaceus europaeus</i>)

2.4 Survey Limitations

- 2.4.1 No survey limitations were experienced during the habitat survey as it was conducted within the optimum Phase 1 Habitat Survey period (April to October inclusive) and all areas of the site were accessible.

3.0 Results

3.1 Desktop Study

Site Designations

- 3.1.1 The site has no statutory or non-statutory designation for nature conservation. Although the site is within Greenbelt and a Conservation Area. There are no statutory sites identified within one kilometre. Four non-statutory sites, Knowsley Local Wildlife Sites (LWS), were identified within one kilometre of the site (as detailed in **Table 3.1**, below).

Table 3.1: Designated Nature Conservation Sites within 1 Kilometre

Site	OS Grid Reference	Distance from Site	Description
Tarbock Green Ditch LWS	SJ 465874	30 metres	Open water course that provides favourable water vole habitat
Brickwall Covert LWS	SJ 461877	270 metres	Broadleaved and mixed plantation woodland and wetland habitats. Notable for its plant communities
Dog Clog Brook LWS	SJ 472877	390 metres	Open water course that provides favourable water vole habitat
Orchre Brook, Tarbock	SJ 463883	550 metres	Fast flowing stream which provides favourable water vole habitat

- 3.1.2 The site lies within a Site of Special Interest (SSSI) Impact Risk Zone for the overlapping overlapping Mersey Estuary SSSI, Special Protection Area (SPA) and Ramsar sites are situated approximately 4.6 kilometres to the south-east. Proposals within the Impact Risk Zone that meet certain criteria require consultation with Natural England regarding the potential impacts on designated sites. In relation to non-rural residential applications only proposals for 50 units or more outside existing settlements/urban areas require further consultation.

3.2 Plant Species and Habitats

- 3.2.1 The site measures approximately 0.3 hectares in size and lies within a rural setting in Tarbock Green. The northern boundary is defined by fencing, beyond which lie residential houses and their associated gardens. The western and southern boundaries are defined by hedgerow, beyond which lies Water Lane and Netherley Road. The eastern boundary is also defined by hedgerow, beyond which lies arable farmland.
- 3.2.2 The site comprises of mixed trees, introduced shrubs, amenity grassland, buildings and hard standing.
- 3.2.3 A Phase 1 Habitat map is appended at **Figure 7.1**

Mixed Trees and Introduced Shrubs

- 3.2.4 There are several mixed trees within the site. Species comprise Cedar (*Cedrus* species), Cypress (*Cupressus* species), Willow (*Salix* species), Silver Birch (*Betula pendula*), Purple Beech (*Fagus sylvatica purpurea*), Common Laburnum (*Laburnum anagyroides*), Horse Chestnut (*Aesculus hippocastanum*), Magnolia species, Apple (*Malus* species), Pear (*Pyrus* species) and Elder (*Sambucus nigra*).

- 3.2.5 In addition, there are several ornamental planting beds within the site which include species such as Cherry Laurel (*Prunus laurocerasus*) and Privet (*Ligustrum ovalifolium*), *Cornus* species.

Hedgerows

3.2.6 Hedgerow 1

- 3.2.7 Hedgerow 1 (refer to **Figure 7.1**) defines part of the western boundary (**Photographs 7.1** and **7.2**). The hedgerow is approximately 80 metres long, one metre wide and 2.5 metres high. The hedgerow comprises dominant Hawthorn (*Crataegus monogyna*) and occasional Garden Privet (*Ligustrum ovalifolium*), Elder (*Sambucus nigra*) and Holly (*Ilex aquifolium*). The understorey is characterised by locally abundant Ivy (*Hedera helix*), frequent Garlic Mustard (*Alliaria petiolata*), occasional Cleavers (*Galium aparine*), Common Nettle (*Urtica dioica*) and Broadleaved Dock (*Rumex obtusifolius*).

- 3.2.1 A plant species list for Hedgerow 1 is appended at **Table 7.2**.

Hedgerow 2

- 3.2.2 Hedgerow 2 (refer to **Figure 7.1**) also defines part of the western boundary. This is ten metres long, one metre wide and six metres high. This hedgerow comprises entirely of Leyland Cypress (*X Cuprocyparis leylandii*).

Hedgerow 3

- 3.2.3 Hedgerow 3 (refer to **Figure 7.1**) defines the eastern boundary. This is approximately 60 metres long. 1.5 metres wide and four metres high. The hedgerow comprises dominant Hawthorn and occasional Elder, Holly and Ash (*Fraxinus excelsior*). The understorey is characterised by locally abundant Ivy, frequent Garlic Mustard, locally frequent Cleavers Common Nettle and Bramble (*Rubus fruticosus* agg.).

- 3.2.4 A plant species list for Hedgerow 3 is appended at **Table 7.3**.

Hedgerow 4

- 3.2.5 Hedgerow 4 (refer to **Figure 7.1**) lies within the site adjacent to the driveway. This is approximately eight metres long, 0.5 metres wide and two metre high. This hedgerow comprises entirely of Leyland Cypress.

Amenity Grassland

- 3.2.6 The majority of the site comprises closely mown amenity grassland. This habitat is characterised by dominant Perennial Rye-grass (*Lolium perenne*), abundant Red Fescue (*Festuca rubra*), occasional Selfheal (*Prunella vulgaris*), White Clover (*Trifolium repens*) and Daisy (*Bellis perennis*) and very locally frequent Springy Turf-moss (*Rhytidiadelphus squarrosus*). A plant species list is appended at **Table 7.1**.

Buildings

Dwelling

- 3.2.7 Refer to **Photographs 7.1 to 7.4**. The detached two-storey dwelling is constructed from rendered mortared brick walls with a pitched roof of clay tiles. A single-storey extension is present at the building's eastern elevation, which also supports rendered brick walls with a pitched tiled roof. The dwelling supports two brick chimneys. The roof is supported by traditional timber purlins and rafters. The building supports a small roof void restricted in height to approximately 1.2 metres.

Garage

- 3.2.8 Refer to **Photographs 7.5 to 7.8**. Adjacent to the dwelling is a single storey garage which is constructed from rendered mortared brick walls and blockwork with a pitched roof of clay tiles. This structure does not support a loft space.

Sheds

- 3.2.9 Refer to **Photographs 7.9 and 7.10**. A dilapidated shed is situated in the north-east corner of the site which is constructed from single-ply timber and is in a severe state of disrepair. An additional shed is present in the garden. This is also constructed from single-ply timber and has a pitched roof covered in Bitumastic roofing felt.

Invasive Species

- 3.2.10 No Japanese Knotweed or any other species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) is present within the site.

Fauna

Badger

- 3.3.1 No setts or signs of badger activity were observed within the site or its surrounds. As such, the presence of badger is reasonably discounted.

Roosting Bats

- 3.3.2 No bats or signs of bats were detected at the external elevations or internal areas of the buildings.
- 3.3.3 The restricted height of the loft space within the dwelling makes it unsuitable for loft dwelling species such as brown long-eared bats (*Plecotus auritus*).
- 3.3.4 Although signs of crevice dwelling bats are not always observable, no suitable sheltered spaces for use by crevice dwelling species such as

Pipistrellus sp. were detected at any of the buildings. In addition, no opportunities for use by hibernating bats at the site were detected.

- 3.3.5 None of the trees within the site boundary contain any features suitable for use by roosting bats. All trees had stems which are intact with no cracks, cavities or lifted bark and the lateral branches do not contain any cracks, crevices or peeling/lifted bark or other sheltered spaces to support bats.
- 3.3.6 Details of all trees surveyed including their species, height, age, condition and diameter at breast height (DBH) are presented within *Arboricultural Implications Assessment Alderley Water Lane Tarbock Green Knowsley* (We Know Services, 2019).

Commuting and Foraging Bats

- 3.3.7 The trees on site are suitable for commuting and foraging bats. However, the site does not support features which would provide a diversity or abundance of invertebrate prey for foraging bats, such as species-rich grassland and suitable waterbodies.

Birds

- 3.3.8 The trees and shrubs on site are suitable for use by passerine bird species. Blackbird (*Turdus merula*), woodpigeon (*Columba palumbus*), robin (*Erithacus rubecula*) and goldfinch (*Carduelis carduelis*) were observed during the habitat survey.
- 3.3.9 The site does not contain suitable habitats for ground nesting or wintering bird species. In addition, the site does not contain any suitable foraging, nesting or roosting habitat for barn owl.

Great Crested Newt

Initial Desktop Search for Ponds

- 3.3.10 A total of 12 ponds have been identified from Ordnance Survey maps and aerial photography within 500 metres of the site, as detailed in **Table 3.2**.

Table 3.2: Ponds within 500 Metres of the Site

Reference	OS Grid Reference	Distance from Site	Location
1	SJ 46357 87683	130 metres	On land west of Water Lane
2	SJ 46144 87824	400 metres	Within Brickwall Covert
3	SJ 45981 87729	445 metres	Within a property adjacent to Netherley Road
4	SJ 46293 87954	415 metres	Within The Coppice west of Water Lane
5	SJ 46771 87831	350 metres	Within a field north of Marklands Farm
6	SJ 46896 87443	430 metres	Within a field east of the site
7	SJ 46536 87355	180 metres	On land south of Tarbock Ditch
8	SJ 46550 87108	430 metres	Within farmland south of Netherley Road
9	SJ 46416 87185	305 metres	Within farmland south of Netherley Road
10	SJ 46307 87249	280 metres	Within farmland south of Netherley Road
11	SJ 46066 87366	365 metres	Within farmland south of Netherley Road
12	SJ 45913 87384	370 metres	Within farmland south of Netherley Road

Consideration of Requirements for Further Survey

- 3.3.11 Ponds 1 to 4 are separated from the site by Water Lane which supports raised kerb stones. It is considered highly unlikely that amphibians will move between the ponds and the site due to the presence of this significant dispersal barrier and the presence of more favourable immediate (<50 metres) and intermediate (50 to 250 metres) terrestrial habitats surrounding these ponds.
- 3.3.12 Ponds 5 to 7 are separated from the site by arable farmland. Although intensively managed farmland can be considered a barrier to newt dispersal, the presence of hedgerows provides sufficient corridors for wildlife movement to allow any newts to travel between the site and neighbouring fields.
- 3.3.13 Netherley Road, which supports raised kerb stones, lies between the site and Ponds 8 to 12. It is considered highly unlikely that amphibians will move between the ponds and the site due to the presence of this significant dispersal barrier.
- 3.3.14 No pond is within 100 metres of the site. Ponds 1 and 7 are between 100 and 250 metres from the site, and the remaining ponds are at between 250 and 500 metres from the site.
- 3.3.15 **Table 3.3**, below provides the results of the Natural England Rapid Risk Assessment tool from *Template for Method Statement to support application for licence under Regulation 53(2)(e) in respect of great*

crested newts Triturus cristatus. Form WML-A14-2 (Natural England, 2015).

- 3.3.16 The tool has been completed based on ponds at these distances, and the size of the size (0.3 Hectares). The rapid risk assessment tool assumes that great crested newt are present.

Table 3.3: Rapid Risk Assessment Result

Component	Likely effect	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.001
Individual great crested newts	No effect	0
Maximum:		0.01
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

- 3.3.17 Due to the results of the Natural England Rapid Risk Assessment, which indicates that the site is sufficiently small and distant from all ponds that any proposed development is highly unlikely to impact upon great crested newt populations (if present), no further assessment of the ponds is required.

Invertebrates

- 3.3.18 Habitats within the site do not have the potential to support notable assemblages of invertebrate species due to their management and lack of species diversity.

Reptiles

- 3.3.19 The site and its surrounds provide poor quality habitat for sheltering, basking and hibernating reptile. The site supports a largely even topography and few semi-natural habitats. The site is not adjacent or linked to any areas of favourable habitat for reptile species. The presence of reptiles within the site is reasonably discounted.

Other Wildlife

- 3.3.20 Habitats within the site are suitable for foraging and sheltering hedgehog. As such, the presence of hedgehog is likely. It is considered that the proposals will allow the continued use of the site by this species.

4.0 Evaluation and Assessment

4.1 Designated Sites

- 4.1.1 The site has no designation for nature conservation. Due to the lack of connectivity between site and areas designated for nature conservation and as habitats on site do not compliment those of the designated sites, it is considered reasonably unlikely that the proposals will impact any statutory or non-statutory sites, or the features for which they have been designated.

4.2 Plant Species and Habitats

- 4.2.1 Hedgerows 1 and 3 are habitats of principal importance in accordance with Section 41 of the *NERC Act 2006* and are of local value to wildlife such as nesting birds, foraging bats and hedgehog. The Hedgerow Regulations 1997 do not apply to these hedgerows as they mark the boundary of a curtilage of a dwelling house.
- 4.2.2 No other priority habitats are present within the site. The grasslands contain only common widespread species and are not significant in terms of their plant species composition.
- 4.2.3 It is concluded that, provided the recommendations presented at **Section 5.0** are adhered to, the proposals will have no negative impact upon priority habitats.

4.3 Fauna

Bats

Roosting Bats

- 4.3.1 All buildings and trees within the site are considered to be of negligible suitability for roosting bats in accordance with the criteria listed in Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, (ed.), 2016).

Commuting and Foraging Bats

- 4.3.2 The site is considered to be of low suitability for commuting and foraging bats in accordance with the criteria listed in Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, (ed.), 2016). Recommendations to minimise the impact of the proposals on commuting and foraging bats (retention of green corridors, use of appropriate landscape planting and a sensitive lighting scheme) are presented at **Section 5.0**.

Birds

- 4.3.3 Habitats within the site are suitable for use by foraging and nesting common passerine bird species. All birds are protected while they are

nesting under the *Wildlife and Countryside Act 1981* (as amended). Provided that the trees on site are retained and the recommendations presented at **Section 5.0** are adhered to, suitable foraging and nesting habitat within the site will remain available for birds. Therefore, the proposals will not adversely affect the local bird population.

5.0 Recommendations and Conclusion

5.1 Retention of Habitats and Landscape Planting

- 5.1.1 It is recommended that the hedgerows are retained and protected, where possible. Where section of hedgerow must be removed, an equal or greater length of compensatory native hedgerow planting should be provided. Recommended species for compensatory hedgerow planting are provided at **Table 5.1**.
- 5.1.2 It is recommended that any landscape planting incorporated within the development is composed of native species and species known to be of value for the attraction of wildlife.
- 5.1.3 It is recommended that trees which support blossom and fruit which will attract insects are incorporated. Suitable species are presented at **Table 5.1**, below.

Table 5.1: Recommended Species for New Tree and Shrub Planting

Scientific Name	Common Name	Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple	<i>Prunus avium</i>	Wild Cherry
<i>Alnus glutinosa</i>	Alder	<i>Prunus padus</i>	Bird Cherry
<i>Betula pendula</i>	Silver Birch	<i>Prunus spinosa</i>	Blackthorn
<i>Carpinus betulus</i>	Hornbeam	<i>Rosa arvensis</i>	Field-rose
<i>Corylus avellana</i>	Hazel	<i>Rosa canina</i>	Dog-rose
<i>Crataegus monogyna</i>	Hawthorn	<i>Sambucus nigra</i>	Elder
<i>Fagus sylvatica</i>	Beech	<i>Sorbus aucuparia</i>	Rowan
<i>Ilex aquifolium</i>	Holly	<i>Tilia cordata</i>	Small-leaved Lime
<i>Malus sylvestris</i>	Crab Apple	<i>Viburnum opulus</i>	Guelder-rose
<i>Pinus sylvestris</i>	Scots Pine	<i>Quercus robur</i>	Pedunculate Oak

- 5.1.4 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.
- 5.1.5 Planting schemes that include flowering species such as *Calluna*, *Ceanothus*, *Hebe*, *Lavendula*, *Lonicera*, *Potentilla*, *Rosemarinus*, and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

5.2 Bats

Protection

5.2.1 It is recommended that any lighting implemented at the site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over areas of trees and shrubs, as lighting overspill may deter use by wildlife such as foraging bats.

5.2.2 When installing lighting reference should be made to the following guidance:

- *Artificial lighting and wildlife. Interim guidance: Recommendations to help minimise the impact of artificial lighting* (Bat Conservation Trust, 2014); and
- *Bats and lighting: overview of current evidence and mitigation guidance* (Stone, 2014).

Enhancement

5.2.3 It is recommended that consideration is given to the installation of bat access panels or boxes at the dwelling or retained mature trees (such as Schwegler 1FQ and 1FF). An ecologist can advise on the siting of the bat boxes.

5.3 Birds

Protection

5.3.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is mandatory that if any trees, shrubs or other suitable breeding bird habitat is to be removed as part of the proposals they are only removed outside the bird breeding season. The breeding season typically extends between March to August inclusive.

5.3.2 If habitats are scheduled for removal during the breeding season it is recommended that advice is sought from an ecologist. It may be necessary to conduct a walkover survey to demonstrate that no nesting birds, active nests, eggs or fledgling are present in the area to be cleared. If nesting birds are present an ecologist will issue guidance in relation to the protection of the birds.

Enhancement

5.3.3 It is recommended that house sparrow nest boxes or general bird box (such as Schwegler 1MR Avianex) are installed at the dwelling. The boxes should not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes

should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest.

5.4 **Conclusion**

5.4.1 This ecological appraisal has demonstrated that the proposals are feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.

5.4.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna and secure ecological enhancement for fauna typically associated with residential properties.

6.0 **References**

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7.0 Appendix 1: Species List and Figure

Table 7.1: Photographs



Photograph 7.1: Existing dwelling southern elevation



Photograph 7.2: Existing dwelling southern and eastern elevation



Photograph 7.3: Existing dwelling northern elevation



Photograph 7.4: Existing dwelling western elevation



Photograph 7.5: Existing garage southern elevation



Photograph 7.6: Existing garage eastern elevation



Photograph 7.7: Existing garage southern and western elevation



Photograph 7.8: Existing garage northern elevation



Photograph 7.9: Dilapidated shed



Photograph 7.10: Dwelling northern and western elevation

Table 7.2: Hedgerow 1 Plant Species List

Scientific Name	Common Name	DAFOR*	Cover
Woody Species			
<i>Crataegus monogyna</i>	Hawthorn	D	85%
<i>Ilex aquifolium</i>	Holly	O	5%
<i>Ligustrum ovalifolium</i>	Garden Privet	O	5%
<i>Sambucus nigra</i>	Elder	O	5%
Understorey Species			
<i>Alliaria petiolata</i>	Garlic Mustard	F	25%
<i>Galium aparine</i>	Cleavers	O	5%
<i>Hedera helix</i>	Ivy	LA	40%
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O	5%
<i>Urtica dioica</i>	Common Nettle	O	5%
* D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = rare, L = Locally and V = Very Species shaded grey are those listed as either woody or woodland species in <i>The Hedgerow Regulations 1997</i>			

Table 7.3: Hedgerow 3 Plant Species List

Scientific Name	Common Name	DAFOR*	Cover
Woody Species			
<i>Crataegus monogyna</i>	Hawthorn	D	85%
<i>Ilex aquifolium</i>	Holly	O	5%
<i>Fraxinus excelsior</i>	Ash	O	5%
<i>Sambucus nigra</i>	Elder	O	5%
Understorey Species			
<i>Alliaria petiolata</i>	Garlic Mustard	F	25%
<i>Galium aparine</i>	Cleavers	O	5%
<i>Hedera helix</i>	Ivy	LA	40%
<i>Rubus fruticosus</i> agg.	Bramble	O	5%
<i>Urtica dioica</i>	Common Nettle	O	5%
* D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = rare, L = Locally and V = Very Species shaded grey are those listed as either woody or woodland species in <i>The Hedgerow Regulations 1997</i>			

Table 7.4: Amenity Grassland Plant Species List

Common Name	Scientific Name	DAFOR*	Cover
<i>Achillea millefolium</i>	Yarrow	R	<1%
<i>Daisy</i>	<i>Bellis perennis</i>	O	<1%
<i>Festuca rubra</i>	Red Fescue	A	5%
<i>Lolium perenne</i>	Perennial Rye-grass	D	90%
<i>Prunella vulgaris</i>	Selfheal	O	4%
<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss	VLF	1%
<i>Trifolium repens</i>	White Clover	O	<1%
* D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = rare, L = Locally and V = Very			



- KEY:**
- BROADLEAVED TREE
 - CONIFEROUS TREE
 - HEDGEROW
 - INTRODUCED SHRUBS
 - AMENITY GRASSLAND
 - BUILDING
 - HARD STANDING
 - FENCE



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Client:
Mr Darrin Addams

Site Address:
Alderley, Water lane,
Tarbock Green

Drawing Title: Figure 7.1
Drawing No: 19/00042/7.1

Date: 17/07/19
Scale: NTS
Drawn by: NW

Note: Dimensions are not to be scaled from this drawing.
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