

PRELIMINARY ECOLOGY SURVEY

FOR

LAND AREA AT THE DUKE OF MARLBOROUGH  
HEPWORTH

IP22 2PY

ON BEHALF OF

HOLLAND LLOYD

FOR

MR G SUTTON

DECEMBER 15 TH 2020

TCW/FE/ 8827020

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A Member of the Suffolk Bat Group

and C M Vickers BSc Hons

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## Contents

### Page

1	Instruction
2	Method
3/4	Objectives
5	Species covered by legal protection
6	Considerations
7	Site Description
8/9	Site Photographs
10/11	Field survey -Habitat Description
12 / 15	Assessment of relevant / regional protected species
16	Summary / Impact assessment.
17 / 18	Recommendations
19	References

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PROPOSAL - Residential Development.  
Holland and Lloyd Ref Duke of Marlborough , Hepworth 4469

Site Land ranger grid reference TL 987 740.  
Red Line boundary site plan.

## 1 METHOD

### SITE VISIT - FIELD STUDY

A walk over of the proposed development site area and that of the neighbouring pond was carried out on the 14<sup>th</sup> of December 2020 by Tim Watts an independent, qualified and experienced ecologist.

The pond area and pond bed was walked with the aid of chest waders and the use of a steel framed 650 by 450 mm - 2 mm mesh dip net and investigation made of invertebrate / macro invertebrate and flora – macrophytes.

Conditions would be sub optimal for certain species- observation, however this was not considered to be a barrier to appraisal of habitat and any future survey recommendations.

Objective to establish the possible presence and habitat suitability of protected species within the area of impact. Consideration given to land area of physical development and that of surrounding landmass – within viable / relevant distance with regard to particular species mobility / access to any change of use /development proposals .

Trees and building were inspected following the Bat Conservation Trust - Good practise Guidelines (3<sup>rd</sup> edition) PRA Preliminary Roost Assessment techniques.

Trees / scrub area were inspected for habitat merit - evidence of nesting, feeding areas and refuge of local conservation bird species.

The area was evaluated regarding reptile habitat.

## 2 OBJECTIVE LEGISLATION

The objective was to investigate for species which have specific protection within the Wildlife and Countryside Act 1981, European Habitats Directive on Conservation of Natural Habitats of Wild fauna and Flora 1994 and subsequent amendments to Conservation of Habitats and species regulations 2010 ( paragraph 98 of circular 06/2005 accompanying PPS9) states ' the presence of a protected species is a material consideration where a development proposal that if carried out would be likely to result in harm to the species or it's habitat' Followed by the Conservation of Habitats and Species regulation 2017 articles 1(b) and 1 (h) of the habitats directive ' Priority Natural Habitat Type' and ' Priority Species' ENGLANDS'S BIODIVERSITY 2020 : A Strategy for Wildlife and Ecosystem Services.

The threshold above which a person will commit the offence of deliberately disturbing a wild animal of European protected species has been raised. Now, a person will commit an offence if he deliberately disturbs such animals in a way as to be likely significantly to affect (a) the ability of any significant groups of animals of that species to survive, breed or rear or nurture their young, or (b) the local distribution of that species. However it is to be noted that the existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection ( for example bat roost-badger set) ,disturbance and sale still apply to European protected species.

Survey consideration given to:

The Protection of Badgers Act 1992 consolidates previous badger legislation by providing comprehensive protection for badgers and their setts, with requirement that any authorised sett disturbance or destruction be carried out under NE licence.

The European Community Council Directive on the Conservation of Wild Birds ( 79/409/EEC) sets out general rules for the conservation of all naturally occurring wild birds, their eggs and habitats. It requires a member states to designate Special Protected areas ( SPAs) for protection of certain species.

The Survey was carried out with consideration of the Countryside and Rights of Way Act 2000 " Crow Act " and amendments to the species protection measures provided by the Wildlife and Countryside Act 1981. With particular reference to Great crested newts.

The Hedgerows Regulation 1997 aim to protect important hedgerows in the countryside. They make it illegal to remove most countryside hedges without first notifying the local planning authority, and provide protection for ' important hedgerows'. Particular seasonal reference to bird nesting regarding hedgerow management works.

In addition to investigate local species listed in the UK Biodiversity action plan for Suffolk/Essex - 'Species of Conservation Concern' to build up a reliable and responsible picture of localised populations where present.

IN CONSIDERATION OF THE LATTER ANY REQUIREMENT FOR FUTURE SURVEY WORKS.

### 3 SPECIES OF LEGAL PROTECTION

The species below have particular conservation status as mentioned within both local and European relevance, red/amber listed or covered by general protection within life cycle, migration, or habitat that may be considered and surveyed within an ecology statement.

Species covered by Statutory Instrument Schedule 2EHD

Great Crested Newt (*triturus cristatus*)  
Otter (*lutra lutra*)  
Bats (all species *rhinolophidea* and *vespertilionidae*)  
Dormouse (*muscardinus avellanarius*)

#### SPECIES COVERED BY LOCAL ACTION PLANS AND WILDLIFE AND COUNTRYSIDE ACT 1981 ---- SPECIALIST CONSERVATION / PRIORITY SPECIES.

Barn Owl (*tyto alba*)  
Water vole (*arvicola terrestris*)  
Hazel Dormouse (*muscardinus avellanarius*)  
Hedgehog (*erinaceus europaeus*)  
Badger (*meles meles*) covered by the Badgers Act 1992

All amphibians - Great crested, Smooth, and Palmate newts. Common and Natterjack Toad, and Common Frog.

All reptiles.

All wild birds nests and eggs  
Specimen and specialist flora

Note and record non Native / invasive alien species such as Japanese knotweed / Signal Crayfish

## IMPLICATIONS OF LEGISLATION AND POLICIES

With legal responsibilities and planning implications, it is essential that any ecological assessment of potential development site, including the area of this report, must determine the possible presence or absence of any protected species as part of any planning development consideration. Or make recommendations for further survey work to conclude presence of protected species.

Without this assessment the potential developer would be unable to demonstrate due diligence in his/her responsibilities. Further more the local planning authority would not have been provided with sufficient information for a planning decision to be made. This could result in the application being designated incomplete and not determined, or simply refused.

Where mitigation or compensation measures are required to ensure that no significant impacts will result on biodiversity from the development, the proposed measures may be secured through planning conditions or by EPS Mitigation Licences from Natural England.

4 CONSIDERATION WAS GIVEN TO THE SITES HABITAT SUITABILITY TO LOCAL PROTECTED SPECIES WITH REFERENCE TO THE SUFFOLK BIODIVERSITY INFORMATION SERVICE DATA.

CONSIDERATION GIVEN TO AREA OF IMPACT REGARDING HABITAT CHANGE AND DISTURBANCE TO THE LOCAL ENVIRONMENT.

5 A SEARCH WAS UNDERTAKEN FOR EUROPEAN AND UK STATUTORY DESIGNATED SITES WITHIN 7KM OF THE SITE BOUNDARY USING MAGIC (MULTI AGENCY GEOGRAPHIC INFORMATION FOR THE COUNTRYSIDE) ONLINE DATA RESOURCE

## 6 SITE DESCRIPTION

The proposed development site consists of area of some seven hundred and fifty square metres of predominately outside seating and Car Park. The area immediately abuts the North end of the Duke of Marlborough Public House.

The site sits some forty metres North of the A143 Bury Road, which would be considered a major hazard to local wildlife.

To the west is adjoining hardstanding car park area and managed ornament shrub beds of no conservation value.

An historical hedge and drainage ditch system boundaries the North of the site and incorporates a pond. The hedge line leads East to connect roadside hedging of 'The Street' Hepworth. Within the pond area are mature trees of Oak and Ash.

An unbroken historical arable landscape stretches to the North and West of the site.

## 7 FIELD SURVEY - HABITAT DETAIL

- 7.1 The Duke of Marlborough Public House stands to the South of the proposed development area. The building is in active residence, and in good condition, both walls and roof areas. There are no signs of wildlife access.
- 7.2 The site foot print and that of the Eastern adjoining area are of hardstanding-paviour and tarmac. The car park and site are divided by dwarf ornamental shrubs within shale covered beds with no habitat creation. The area has hedge line screening of Laurel *prunus laurocerasus* to some 1.5 metres in height to the North.
- 7.3 The Northern part of development area consists of fence panel screen for an active boiler heating unit and business storage. An open timber frame, sheet tin roofed out building stands in the NW corner. The building is fully illuminated and there is no evidence of bird nests or bats. Various building debris on the floor area tin, timber and plastic were moved / inspected for sheltering amphibians or reptiles, none were found.
- 7.4 The western boundary of the site is of wooden fence panels/ inside metal security fencing and an outer historic hedge and drainage ditch. The hedge line consists of dense Bramble *rubus fruticosus*, scrub Elm -*ulmus proceria minor*, Dog rose *rosa canina* and Blackthorn- *prunus spinosa*.
- 7.5 A stand of mature English Oak *quercus robur* marks the North West hedge corner, of the site's outer perimeter hedge. The four main trunk systems create a canopy of some thirty metres.

7.6 A pond some 250 square metres in size abuts the root base of oaks and is incorporated into the drainage system, along the eastern corridor of hedging.

#### POND AREA DETAIL

7.61 The pond is over shadowed by mature and fallen blackthorn on it's Southern bank. It's Northern bank and shore line consists of encroached dense bramble thicket to a height of some 1.7 m with occasional Goat Willow *salix caprea*.

Marginal water plants are confined to a single clump of Yellow flag *iris pseucacorus*. Elsewhere shading of the pond margins by Blackthorn, Oak and Bramble have prevented the development of a marginal fringe of aquatic habitat.

7.62 A walk of the pond base and sampling found no evidence of rooted or free floating macrophytes that may emerge over the growing season. Sampling found high levels of organic silt consisting primarily of oak leaf deposits, who's decay would be producing an organic pollutant.

7.63 Invertebrate populations were found to be poor with low populations of Backswimmer *notonecta glauca* and Water slater - *asellus aquaticus*. species tolerant to pollution.

7.64 Mallard Duck were present, on the pond.

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7.7 The hedge line runs west and is dominated by Bramble and blackthorn merging onto the field margin where plant populations include Common bistort *persicaria bistorta*, Fleabane *pulicaria dysenterica*, Mugwort *artemisia vulgaris*, Common Knapweed *centaurea nigra*, Prickly sow -thistle *sonchus asper*, Hogweed -*heracleum sphondylium*, and Great willowherb *epilobium hirsutum*.

7.8 A mature Ash - *fraxinus excelsior* stands within the hedge line and blackthorn thicket at the eastern end of the pond.

7.9 The western landscape consists of recently establish grassland.

## 8 ASSESSMENT OF RELEVANT / REGIONAL PROTECTED SPECIES PLS / EPS

### 8.1 AMPHIBIANS.

No evidence of the species was found on the site. The neighbouring pond on the Northern perimeter of the site was inspected for habitat merit and specifically [REDACTED] habitat - Habitat Suitability Index scores were calculated. With additional information the of area mapping and local knowledge.

#### HSI DATA SHEET HABITAT SUITABILITY INDEX TABLE

HSI Criteria	Pond 1
SI1 Location Field Score	1
SI2 Pond Area Field Score	0.4
SI3 Pond Drying Field Score	0.5
SI4 Water Quality Field Score	0.01
SI5 Shade Field Score	0.6
SI6 Fowl Field Score	0.67
SI7 Category	1

SI8 Ponds Field Score	0.1
SI9 Terrestrial habitat Field score	0.67
SI10 Macrophytes Field score	0.3
TOTAL	$0.0000161 \text{ } 10^{\text{th}} \text{ root} = 0.33$

#### Categorisation of HSI Scores.

The Lee Brady developed HSI scoring system defines a ponds suitability for Great Crested Newts as below.

< 0.5 = Poor  
 0.5 – 0.59 = below average  
 0.6 - 0.69 = average  
 0.7 - 0.79 = Good  
 > 0.8 = excellent

The scoring system / calculations would concur with our assessment as to the ponds suitability for amphibians in general being poor.

## 8.2 REPTILES

The perimeter hedge line has some habitat merit with regard to these species. However the history of the surrounding intensive arable landscape, disturbance of the car park areas, the sites proximity to the main road, all make for a hazardous and unsuitable environment for the species.

### 8.3 BATS

The adjoining building of the Duke of Marlborough Public House and that of the open timber structure on the proposed development area have no particular Bat Roost Features.

The proximity of the A143 would make the site unlikely to form part of any flyway or feeding area for the species.

### 8.4 BARN OWLS

The mature trees and open shed show no signs excreta splashing, feathers, pellets or features that would provide nesting or roost area for Barn Owls.

### 8.6 HEDGEHOGS

The dense hedge line bramble adjoining the newly created grassland provide habitats of merit for the species, on the Northern perimeter of the site. However the hedge system has no connectivity other than the main Bury Road and Hepworth Street which provide hazards to the species.

### 8.7 OTTERS

The site provides insufficient habitat for both food or secure refuge for the species.

### 8.8 WATER VOLES

The pond area does not provide suitable aquatic plant fringe or margin and lacks the security of steep pond banks and deep water.

### 8.9 HAZEL DOORMOUSE

The hedge lines of the development perimeter lack suitable species and connectivity to woodland areas of merit.

### 8.10 BIRDS /BIRDS NESTS

The proposed development area lacks suitable areas for bird nesting other than the perimeter hedging. The open shed shows no signs of bird nests.

One pigeons nest is present within the mature blackthorn on the Northern perimeter.

### 8.11 NON NATIVE SPECIES

No non native invasive animal or plants species were identified on the site.

## 9 SUMMARY / IMPACT ASSESSMENT

- 9.1 The foot print of proposed development does not contain wild habitats of conservation merit or habitat to local or European protected species.
- 9.2 The sites boundaries of historical hedge lines and incorporated mature trees provide habitats for common bird species and small mammals.
- 9.3 The neighbouring pond is in poor condition regarding water quality and lacks aquatic marginal plant diversity.
- 9.4 A calculation of HSI data would indicate poor conditions for specifically [REDACTED] [REDACTED] - information gained from the survey / investigation into field / pond conditions.
- 9.5 The neighbouring scrub and hedge line provide good terrestrial conditions for amphibians however these are not supported by viable or sustainable breeding conditions of water quality.
- 9.6 The pond area and terrestrial habitats of hedge line scrub lack connectivity to other areas of viable habitat for amphibian specie
- 9.7 The site sits within an area of traditional intensive agricultural land with no protected wildlife corridor.
- 9.8 The site and boundary hedge lines are immediately connected to the hazards of neighbouring road systems.
- 9.9 The proposed development will not impact on the ability of any local or European protected species to survive and breed.

## 10 RECOMMENDATIONS

10.1 It will be important to ensure any removal of boundary fence panelling or hedge row management does not disturb or destroy active birds nests. These works should be done outside the bird nesting season 1<sup>st</sup> March till the 1<sup>st</sup> September.

10.2 If longer vegetation becomes established on site , it should be cleared sensitively late February to October when animals are still active. This operation commenced in the Southern area working North towards the hedges away from the road.

If longer than 300mm in height vegetation should be trimmed down to ground level using a two stage cut with the first cut to circa 150 mm.

The ground should then be inspected prior to cutting to ground level. If any animals are present they should be left to move by their own volition into areas of retained habitat of neighbouring hedge and scrub.

10.3 During the construction phase , trenches should be filled on the same day as excavation where possible to prevent animals from falling in. Where this is not possible any excavations should be firmly covered overnight with ply/OSB sheets, to exclude any access.

10.6 All materials should be stored on bare ,firm ground or hard standing of the adjoining car park area. - on pallets, to avoid injury to sheltering animals during later movement. Long term storage of materials should be avoided.

10.7 Any building waste stored on site temporarily should be in skips to prevent animals taking refuge.

10.8 Should any animals be encountered over the construction phase, they should be left to disperse naturally, without interference. If this is not possible, then advice should be sought from a suitably experienced ecologist.

10.9 Consideration should be given to the enhancement of the pond area via de silting and coppicing of surrounding blackthorn scrub. These enhancement measures would be of particular benefit to local wildlife if the adjoining grassland is to be put into long term conservation.

T C Watts FMD Principal Ecologist Framlingham Environmental

## 11 REFERENCES

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