Ecological Assessment
Bulls Green Lane
Toft Monks
Norfolk
NR34 0FR

Prepared by:
Margaret Regnault MSc
Margaret's Ecology Ltd

Prepared for:
Roy Munnings

Summary

An ecological assessment was undertaken for Malcolm Dixon on behalf JW Munnings Construction Ltd at Bulls Green Lane, Toft Monks, Norfolk NR34 0FR.

No protected species were discovered on site and no trees are to be removed in the north west of the site, hence the development should have no impact on protected species or habitats.

- Any removal of bramble, trees and shrubs should be undertaken outside birds nesting season which is 1st March to 31st July inclusive.
- If any newts, bats or reptiles are discovered during this development all works should be halted and an appropriate ecologist consulted.

Records

Records of species identified during the course of this survey will be passed to the local Biological Records Centre unless written instructions to the contrary are received within 28 days of receipt of this report. Record Centres manage species and site data for the benefit of all wildlife.

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1 Introduction, objectives and constraints

Margaret's Ecology Limited was commissioned by Malcolm Dixon on behalf of Roy Munnings of JW Munnings to undertake an ecological assessment at Bulls Green Lane, Toft Monks. Norfolk NR34 0FR (Grid reference TM427946). The survey has been carried out to to assess whether there is any ecological impact in connection with a submitted request for a minor extension to the Settlement Boundary to Toft Monks in order to accommodate a small residential scheme; as part of the GNLP DRAFT JCS Consultation exercise Oct/Dec 2018 (Reg 18) " Site Proposals Document Addendum, New, Revised and Small Site"

A walkover survey of the site was conducted by Margaret Regnault MSc, holder of Natural England survey licences in respect of bats, dormice and great crested newts, licence numbers 2015-13061-CLS-CLS, 2016-21032-CLS-CLS and 2015-16570-CLS-CLS on the morning of 6th of November 2018. The weather was sunny and dry with a temperature of 16°C.

The objectives of the survey were to establish the habitats present, assess the likely presence of any protected or notable species and, if any were found, suggest further surveys or to inform a mitigation strategy to ensure that any impacts of the development proposal are minimised.
Relevant species in the context of this survey include amphibians including great crested newts, bats, barn owls, badgers, otter, water vole and reptiles (grass snake, viviparous lizard, and slow worm). It is also relevant that the Wildlife and Countryside Act (1981) provides protection for all nesting birds and their eggs or young whilst in the nest, although certain birds have additional protection under Schedule 1 of the Act. Certain habitats and species of conservation concern are also listed within UK and Local Biodiversity Action Plans (BAPs), as amended 2007.

The survey was conducted outside the main ecological survey season when the majority of flowering plant species are dormant and animals are less active. The findings of this report are, therefore, mainly based on an assessment of the general habitat to support any given species.

2 Survey Methodology

A desktop study was undertaken using Norfolk Biodiversity Information Service (NBIS), data to determine if there were any protected species, or species and habitats listed within the UK or Norfolk Biodiversity Action Plans on or near the site that might be affected by the proposed development.
An assessment was undertaken of ecological reports associated with local planning permissions, these are summarised in Appendix 3.

The field survey consisted of a walkover of the site. Plant species and the habitats present were noted as were any animals or signs that they might be present, as was the suitability of the habitat to support a particular species.

Searches for signs of usage by specific protected species were conducted as follows:

Amphibians including Great Crested Newts

There are no ponds on this site but the terrestrial habitat was assessed for its suitability as foraging habitat and for hibernation sites.
The nearest pond to this site 170m north was assessed for its likelihood of occupation by Great Crested Newts using the Great Crested Newt Habitat Suitability Index.

Bats

The trees were surveyed for evidence of bats using the standard methods deployed by all Natural England bat surveyors. The potential for the trees on site to support roosting bats was assessed; features likely to attract bats, such as natural holes, cracks raised bark and thick ivy cover were inspected for signs indicating possible use by bats.

The relationship of the site to the surrounding habitats was considered with regard to commuting routes. The suitability of the area for foraging was assessed.

Otter

Signs of usage such as spraints, footprints and feeding remains were searched for along the water edges. The site was assessed for its potential to support a holt or resting up place.

Water vole

Most water voles are inactive during cold weather, the usual method of searching banks and bank side vegetation for signs such as runs, burrows and latrines etc. is not as effective as in warmer months. The site and surrounding habitat (including ditches) were inspected for suitability for water voles and permanent features such as holes in banks – these alone cannot be taken as proof of water voles presence.

Reptiles

The site was assessed for its suitability to support this group.

Badgers

Signs such as such as mammal runs, droppings and latrines, snuffle holes, tracks and hair were searched for.

Barn owl

The site was assessed for their suitability as roosting or nesting sites and the whole site for its potential as a hunting area.

Other wildlife

Nesting birds are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended). The presence of suitable nesting habitat on site was assessed.
Note was taken of any other species present during the visit.

3 Results

3.1 Site description

The site is south of the village of Toft Monks of in South Norfolk, four kilometres north of Beccles. The site is dominated by bramble up to two meters tall with occasion small trees. The site was previously an arable field.

The site is bounded on the north-west with a hedge adjoining a 1.5m deep, steep sided ditch containing up to 3cm of water along side Bulls Green Lane.
The site is bounded on the north-east by a narrow band of woodland adjacent to domestic gardens. The south-eastern edge is bounded by a recently planted native woodland and the south western edge also has a recently planted, willow dominated woodland.

Photo 1: Site from the North

Photo 2: Site looking South

Photo 3: Ditch along the road to the west

3.2 Desktop study

3.2.1 Sites of international importance

The nearest site of international importance is the The Broads Special Area of Conservation (SAC) and Broadland Special Protection Area (SPA) 1.7km to the south This main reason for the importance of this SAC site is the habitat of Hard oligo-mesotrophic waters, the richest area for charophytes in Britain, with other habitats

including natural eutrophic lakes. transition mire and both calcareous and alkaline fens. The SPA is designated for its populations of ducks, swans and waders.

3.2.2 Sites of national importance

The nearest site of national importance is Stanley and Alder Carrs, Aldeby SSSI (Site of Special Scientific Interest), 1.7km to the south which is an extensive area of regularly flooded alder carr woodland and fen in the Waveney Valley which supports a variety of plants characteristic of Broadland.

3.2.3 Sites of regional and local importance

This site is 600 meters west of the County Wildlife Site (CWS) of Great Wood, a coppice woodland with standards. This site is a kilometer north of ancient woodland of Gillingham Wood and Thicks a County Wildlife Site.

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3.2.4 Veteran trees

There are no veteran trees recorded within two kilometres of the site.

3.2.5 Records of notable species

According to the data search no Great Crested Newts *Triturus cristatus* or other amphibians or reptiles have been recorded within two kilometres.

Otter have been recorded 3 kilometres to the north of the site.

Water vole have been recorded within 150meters to the north.

The nearest bats recorded are Soprano Pipistrelle *Pipistrellus pygmaeus* a kilometre to the south east. A variety of bat species have been recorded within two kilometres including Common Pipistrelle *Pipistrellus pipistrellus sensu lato,* Western Barbastelle *Barbastella barbastellus,* Noctule Bat *Nyctalus noctula,* Serotine *Eptesicus serotinus* and Brown Long-eared bats *Plecotus auritus.*

Other species recorded in the area include common hedgehog *Erinaceus europaeus (*200 meters south-east) and brown hare *Lepus europaeus* (within 500m of the site) and Harvest mouse *Micromys minutus* (within 3km) which are BAP species.

No great crested newts *Triturus cristatus*, Slow-worm *Anguis fragilis,* Lizard *Zootoca vivipara,* Smooth Newt *Lissotriton vulgaris*, Frog *Rana temporaria,* toad *Bufo Bufo* or Badger *Meles meles,* have been recorded within two kilometres.

The only records if protected flora locally are on the Beccles marshes two kilometres south of the site.

There are a large variety of protected bird species recorded in the area including barn owl *Tyto alba*, Little Owl *Athene noctua*, Buzzard *Buteo buteo* and Red Kite *Milvus milvus* .

There are no recorded alien species on this site but Chinese Muntjac *Muntiacus reevesi* have been recorded locally.

3.2.6 Tree Preservation Orders

The South Norfolk Tree Preservation Order(TPO) (2001) No 1 protects the trees north of the site as part of area "A1" an area of Oak, Ash and Chestnut In the rear gardens of St Benedicts Close and the land adjacent to Badgers Lodge Toft Monks.

3.3 Habitat survey

The site was assessed along with the boundaries and the surrounding habitats.

The main area of the site is dominated by bramble with occasional clumps of pampas grass and tree saplings.
On the west of the site is an area of blackthorn scrub adjacent to a hedge and a well vegetated 1.5 meter deep, steep sided ditch with water up to 3cm deep.

On the north side of the site was an small area of trees of about 50cm Diameter (DBH) adjoined by a 1.5m deep steep sided over-shaded ditch with containing up to 10cm of water.

Flora

Grass and herb species seen on the site include cock's-foot *Dactylis glomerata,* yorkshire fog *Holcus lanatus,* yarrow *Achillea millefolium,* agrimony *Agrimonia eupatoria,* musk thistle *Carduus nutans,* rough chervil *Chaerophyllum temulum,* rosebay willowherb *Chamerion angustifolium,* creeping thistle *Cirsium arvense,* spear thistle *Cirsium vulgare,* canadian fleabane *Conyza canadensis, pampas grass Cortaderia selloana,* wild carrot *Daucus carota,* teasel *Dipsacus fullonum,* willowherb spp *Epilobium spp.,* petty spurge *Euphorbia Peplus,* herb robert *Geranium robertianum,* ivy *Hedera helix,* honesty *Lunaria annua,* black medick *Medicago lupulina,* bristly oxtongue *Picris echioides,* ribwort plantain *Plantago lanceolata,* Common Fleabane *Pulicaria dysenterica,* creeping buttercup *Ranunculus repens,* dog rose *Rosa canina,* bramble *Rubus fruticosa agg.,* Common ragwort *Senecio jacobaea,* groundsel *Senecio vulgaris,* smooth sow-thistle *Sonchus oleraceus,* clover sp. *Trifolium sp,* Scentless Mayweed *Tripleurospermum inodorum,* Great Mullein *Verbascum thapsus* and Common field speedwell *Veronica persica.*

There were scattered tree saplings on site including species such as hawthorn *Crataegus monogyna,* spindle *Euonymus europaeus,* ash *Fraxinus excelsior,* willow *Salix sp.,* dogwood *Thelycrania sanguinea* and elm *Ulmus spp.*

The hedge along the road was dominated by elm *Ulmus spp.* some dead, with hazel *Corylus avellana,* hawthorn *Crataegus monogyna,* blackthorn *Prunus spinosa* and dogwood *Thelycrania sanguinea,*with a sparse understory consisting of cleavers *Galium aparine,* ivy *Hedera helix,* bramble *Rubus fruticosa agg.* and nettle *Urtica dioica.*

Grass and herb species along the road and in the ditch on the northwest side of the road include cock's-foot *Dactylis glomerata, yorkshire fog Holcus lanatus*

common mouse-ear *Cerastium fontanum,* rosebay willowherb *Chamerion angustifolium,* creeping thistle *Cirsium arvense* dove's-foot crane's-bill *Geranium molle,* herb robert *Geranium robertianum,* ground ivy *Glechoma hederacea* hogweed *Heracleum sphondylium,* ribwort plantain *Plantago lanceolata,* greater plantain *Plantago major,* dock *Rumex spp.* hedge woundwort *Stachys sylvatica* and dandelion *Taraxacum officinale.*

The woodland area to the north side of the site contained a variety of trees including ash *Fraxinus excelsior*, oak *Quercus robur,* holly *Ilex aquifolium,* elm *Ulmus spp.* with an understory of herb robert *Geranium robertianum,* ground ivy *Glechoma hederacea,* ivy *Hedera helix,* dock *Rumex spp.* nettle *Urtica dioica,* holly *Ilex aquifolium* and elm *Ulmus spp.*

The young woodland area to the south-west was dominated by willow *Salix sp. w*ith field maple *Acer campestre*, hawthorn *Crataegus monogyna* and dogwood *Thelycrania sanguinea.* This area had a poor undeveloped understory dominated by moss with occasional hard rush *Juncus inflexus,* bramble *Rubus fruticosa agg.* and hedge woundwort *Stachys sylvatica.*

The planted woodland on the east side of the site was composed of trees at about 10cm Diameter at Brest height (DBH) with no understory and was composed of field maple *Acer campestre,* hawthorn *Crataegus monogyna,* spindle *Euonymus europaeus,* ash *Fraxinus excelsior,* douglas fir *Pseudotsuga menziesii* and pedunculate oak *Quercus robur.*

3.4 Protected species survey and mitigation

3.4.1 Amphibians

There are no ponds within the site and no records of amphibians within two kilometres. The nearest pond is the village pond 175m to the north; this was assessed as "Below average" according to the habitat suitability index (Appendix 2), mainly due to the turbid water and the presence of fish and ducks.

Photo 4: Village Pond

3.4.2 Bats

There were no buildings on site. There are no significant trees within the main site suitable for bats but there are several significant trees within the small woodland on the north which may be suitable as bat roosts. Tree 1, shown in photo 4, is a dead ash tree towards the west of the site, Tree 2, shown in photo 5, is typical of other Ivy covered Oaks of diameter at breast height (DBH) of 50cm. This is representative of a couple of similar trees which should be considered if they are due to be removed.

Photo 5: Dead Ash in North of site

Photo 6 : Typical Ivy covered Oak north of site

These trees are covered by the Tree Protection Order(TPO) outlined in section 3.2.6 above

Features of trees used as bat roosts	**Items seen on site visit**	
Tree number, Species DBH (cm) Approx	**T1 Ash 40**	**T2 Oak 50**
Photo number	**5**	**6**
Natural holes	Yes	No
Woodpecker holes	Yes	No
Cracks/splits in major limbs	Yes	No
Loose bark	Yes	No
Behind dense, thick-stemmed ivy	No	Yes
Hollows/cavities	Yes	No
Within dense epicormic growth	No	No
Bird and bat boxes	No	No

In view of the above assessment and the structure and position of these trees it is considered possible that these contain a bat roost. As most of the trees are due to be

retained in this development, this is not considered a problem. If the trees need to be removed then a bat survey should be undertaken to ensure that no bats are disturbed.

3.4.3 Otters and Water voles

The ditches adjacent to the site were dry or contained only very shallow water hence these ditches are unsuitable for both Otter and water vole. No signs of otter or water vole were observed.

3.4.4 Reptiles

There are no records of reptiles in the area. There was plenty of rubble piles on site which could act as hibernation areas for this species. No reptiles were observed during this survey. There are no obvious basking areas for these species. Hence it is unlikely these species are using this site.

3.4.4 Badgers

There are no signs of badgers on site and no records of badgers locally. Where the site could be inspected there was no badger sett visible on this site. There are areas underneath the blackthorn scrub in the east and under the bramble which were inaccessible, but no suitable mammal runs or latrines were visible.

3.4.5 Barn Owls

No signs of Barn owls were seen, there is potential roosting places for this species in the area of woodland north of the site but the bramble domination makes the site a difficult foraging area.

3.4.6 Other wildlife observed.

Birds seen or heard on site include: woodpigeon *Columba palumbus,* robin *Erithacus rubecula,* great tit *Parus major,* house sparrow *Passer domesticus,* magpie *Pica pica* and blackbird *Turdus merula.*

The main area has a variety of mammal runs about 20cm tall and flat areas which indicates that the site is probability used by Muntjac deer.

As the site visit was undertaken on a sunny day in November no invertebrates were expected or seen.

4 Conclusion

4.1 Habitat survey

There is no protected habitat on site, and a search of local planning applications raised no issues.
The hedgerow and ditches should be retained as far as possible and be protected during construction in line with best practice.

4.2 Protected species survey

4.2.1 Amphibians

There is no ponds on site for amphibians and no Great Crested Newts recorded in the area hence this development should have no impact on any amphibians including Great Crested Newts.

The following precautions should be observed to minimise the impact should Great Crested Newts be present.

- Cover any trenches overnight to prevent wildlife from falling in.
- Store any building materials on pallets.

If newts are found, works should stop immediately and the situation re-assessed by a qualified ecologist.

4.2.2 Bats

If any of the larger trees in the wooded area north of the site need to be removed further investigation will be required. in particular if it is required to remove the Ash tree, shown in Photo 5 towards the north west of the site, a bat survey would be required to ascertain presence or absence of bats and if presence the number and bat species are required to determine the mitigation required.

According to the “Indicative site layout” plan ref 030318-2 the large trees in the north are to be retained hence this development should have no impact on bats.
To enhance the area for bats it is recommended that all lighting is downwards facing and bat friendly. This will ensure that the area would remain as potential habitat for these species.
If a bat is discovered whilst any works are being undertaken please halt all works and contact a suitable qualified ecologist.

4.2.3 Otters and Water voles

There is no evidence of otter or water voles on site; hence this development should have no impact on otter or water voles.

4.2.4 Reptiles

It is considered unlikely reptiles are using this area; hence development should not affect reptiles. If reptiles are seen, work should stop and a qualified ecologist should be

consulted to ascertain the degree of presence of the species and if necessary recommend suitable mitigation measures.

4.2.5 Badgers

There are no signs of badgers and no setts on site so this development should not affect Badgers.

4.2.6 Barn Owls

There are no signs of barn owls on site; no suitable roosting or nesting sites within the site hence this development should not affect Barn owls.

4.2.7 Birds

The trees and scrub provide good habitats for birds**.** Clearance of areas of bramble, scrub or hedges should be avoided during the breeding bird season (1st March to 31st July inclusive). If this is not possible, any potential areas should be preceded by a check by an ecologist to search for active nests.

4.3 Suggestions for habitat enhancements

4.3.1 Ditch enhancements

The ditches by the road and the other side of the northern wooded area have vertical sides, it would be better for wildlife if these ditches contained gentler slope of 45° maximum.

4.3.2 Planting

Where practicable, planting should be of native species of local provenance, including trees and shrubs appropriate to the local area. It is also recommended that any grass seed mixes used are flower-rich and should include various native plant species that are known to provide nectar and pollen to pollinating invertebrates.

4.3.3 Lighting

The sympathetic use of lighting is vital for bats, birds and invertebrates. According to the recommendations relating to bats by Stone (2014) for lighting, LED units can be used to direct the light into small target areas. Composite LEDs can be switched off to reduce or direct the light beam to specific areas is required and away from wildlife habitat, including the trees, hedges and ditches.
Works should be undertaken during daylight hours and artificial lighting should be avoided wherever possible to reduce any disturbance to bats. When this is impossible light spillage onto any wildlife features such as the hedges should be avoided by the use of directional lighting.

4.3.4 Hedgehog friendly gardens.

Hedgehogs have been recorded within 200m. According to the BTO the proportion of sites with hedgehogs has declined by 40% over the past ten years. To enhance the area for hedgehogs, garden fences should include holes 13x13cm at ground level to allow hedgehogs to pass through, allowing continued access and some foraging through the site. The holes should preferably be within the gravel boards rather than the fence panel.

4.3.5 House Sparrow Terrace

As house sparrows were seen on the site visit, it is recommended that a Schwegler 1sp sparrow terrace is included within the design at two meters or more above ground level. In order to maintain a food source it is recommended that an area of wildlife friendly planting is included within the design to encourage insects on to the site.

4.3.6 Other wildlife enhancements.

During construction holes should be left covered overnight or with an “exit plank” during construction to enable any amphibians or small mammals e.g. frogs or Hedgehogs to exit any holes as required.

5 References

ARG UK (2010) Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Groups of the United Kingdom ARG UK Advice Note 5
http://www.narrs.org.uk/documents/HSI%20guidance.pdf

BTO (2011) British hedgehogs are in decline: different surveys tell the same story. From http://www.bto.org/science/monitoring/hedgehogs

HMSO (1981) Wildlife and Countryside Act 1981 (as amended), (from https://www.legislation.gov.uk/ukpga/1981/69)

Hundt, L. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). Bat Conservation Trust. (from http://www.bats.org.uk/pages/batsurveyguide.html)

JNCC Special Area of Conservation (SAC) The Broads citation
http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0013577 (accessed November 2018)

JNCC Special Protection Area(SPA) Broadland citation
https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK9009253&SiteName=&countyCode=&responsiblePerson=&unitId=&SeaArea=&IFCAArea= (accessed November 2018)

Langton, T., Beckett, C., Foster, J. (2001) Great Crested Newt Conservation Handbook. Froglife, Halesworth.

NBIS Norfolk Species Action Plans http://www.nbis.org.uk

Norfolk Councils (2018) The Greater Norwich Local Plan Housing and Economic Land availability Assessment (HELAA) Adendum October 2018
Toft Monks Site GNLPSL2005

South Norfolk District Council (2001) Town and country planning act 1990 The Norfolk (South Norfolk district council) Toft Monks Tree preservation order 2001 no 1

South Norfolk planning applications from https://info.south-norfolk.gov.uk/online-applications/ accessed November 2018

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation.

Appendix 1: Protected habitat and species legal status

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs, LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority.
Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

Great Crested Newt

Great Crested Newts are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and as amended by the Countryside and Rights of Way Act 2000. They are also afforded protection within European legislation, the Habitats Directive, as implemented by The Conservation of Habitats and Species Regulations 2017. As a European Protected Species Great Crested Newt is protected against:

- deliberate capturing, injuring or killing
- deliberate disturbance which in particular relates to disturbance likely to -
    - impair the ability to survive, breed, or rear or nurture their young; or
    - impair their ability to hibernate or migrate
    - affect significantly the local distribution or abundance of that species;
- deliberate taking or destroying the eggs of such an animal; or
- damaging or destroying a breeding site or resting place of such an animal and/or intentionally or recklessly -
    - disturbing any such animal while it is occupying a structure or place which it uses for shelter or protection; or
    - obstructing access to any structure or place which any such animal uses for shelter or protection.

Great Crested Newts are also a Biodiversity Action Plan species.

Bats

Bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 and as amended by the Countryside and Rights of Way Act 2000. They are also afforded protection within the European Habitats Directive, as implemented by The Conservation of Habitats and Species Regulations 2017.
It is an offence in the UK to:

- deliberately capture, injure or kill a bat
- deliberately disturb a bat in a way that would affect its ability to survive, breed, rear young, hibernate or migrate or significantly affect the local distribution or abundance of the species
- damage or destroy a roost (this is an 'absolute' offence)
- possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.
- intentionally or recklessly disturb a bat at a roost or obstruct access to a roost.

Some species of bats are included as Biodiversity Action Plan species.

Otter

Otter are listed on schedule 5 and 6 of the Wildlife and Countryside Act 1981 and Schedule II of the Conservation of Habitats and Species Regulations 2010 (which also implements the Berne Convention 1979, where otter is listed in Appendix II). It is an offence to intentionally kill, injure or trap an otter or be in possession of a live or dead otter or any part of one or intentionally damage, destroy or obstruct access or disturb any otter shelter or animal while occupying such shelter. Otter is a Biodiversity Action Plan Species.

Water vole

Water vole is listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended April 2008) and is a fully protected species. It is an offence to intentionally kill, injure or take a water vole; possess or control a live or dead water vole; intentionally damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or disturb water voles using such a place. Water vole is a Biodiversity Action Plan Species.

Reptiles

There are four reptile species likely to be present: adder, viviparous lizard, slow-worm and grass snake. All three are protected under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Under the Act it is illegal to:

- intentionally, or deliberately, kill or injure reptiles
- sell, barter or exchange reptiles, or parts of reptiles.

Development of a site where reptiles are known to be present, without taking the necessary measures to protect them, could legally constitute intentional killing or injuring (English Nature, 2004). All reptiles are Biodiversity Action Plan species.

Badgers

All badger legislation has been combined under The Protection of Badgers Act 1992. This makes it illegal for any person to kill, injure or take a badger. It is an offence to cruelly ill-treat a badger, to dig for or to snare a badger. Under the 1992 Act it is illegal to damage a badger sett or cause a dog to enter a sett. It is also an offence to attempt any of these actions or recklessly allow a dog to enter a sett.

Barn Owls

Barn owls are listed on Schedule 1, of the Wildlife and Countryside Act 1981 (as amended). which gives them special protection. It is an offence with certain exceptions, to:

- Intentionally kill, injure or take (handle) any wild barn owl
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being built
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst building a nest or whilst in, on or near a nest containing eggs or young.
- Intentionally or recklessly disturb any dependent young of wild barn owls.

Licences cannot be issued for removal of barn owls to facilitate development.

Nesting birds

Nesting birds are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), which gives protection to all wild birds and makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird, whilst it is in use or being built;
- or take or destroy the egg of any wild bird (subject to certain exceptions).

Appendix 2: Great Crested Newt Pond habitat suitability index

The village pond was assessed for Great crested newts using the Habitat Suitability Index see the table below.
As this assessment was undertaken in the autumn both the fish and macrophyte values were estimated.

	Village Pond	P1 SI
Location	England	1
Pond area	150	0.3
Pond drying	Never	0.9
Water quality	Poor	0.33
Shade	0	1
Fowl	Minor	0.67
Fish	Minor	0.33
Pond count /km	25/3.142	1
Terrestrial habitat	Poor	0.33
Macrophytes*	20%	0.5
Product(Si 1-Si 10)	0	3.25×10^{-03}
Habitat Suitability Index		0.564
Categorization		Below average
Distance to Site	175m	
Intervening habitat quality	Domestic gardens and dry ditches	

Table 1: Habitat suitability index for the village Pond.

The village pond was assessed assessed as “Below average”, mainly due to the turbid water and the presence of fish and ducks.

Notes:
Limitations of HSI from Great Crested Newt Habitat Suitability Index (2010)
The HSI for great crested newts is a measure of habitat suitability. It is not a substitute for newt surveys. In general, ponds with high HSI scores are more likely to support great crested newts than those with low scores. However, the system is not sufficiently precise to conclude that any particular pond with a high score will support newts, or that any pond with a low score will not do so.

Appendix 3: Ecological reports within local planning applications

A search was undertaken of planning applications within the parish of Toft Monks over the last 5 years, looking for any applications with ecological surveys.

Most planning applications did not contain ecological reports with the exception of 7 sites with applications.

Planning No	Site	Application
2018/0485 2017/2186	Barn South Of 12 Hall Road Toft Monks	Change of use from an agricultural building to a dwelling house.
2018/0742	Withaview Rectory Road Gillingham	Demolish existing building and replace with new dwelling.
2017/1713	The Beeches Burnthouse Lane Toft Monks	Conversion of barn to residential dwelling.
2015/2159	Wavenery Self Storage Elms Road Toft Monks Norfolk	Change of use of former pig building.
2015/0746	Land North Of Post Office Road Toft Monks Norfolk	Erection of an agricultural building.
2014/2522	Hill House Beccles Road Toft Monks Norfolk	Three Bay Cart Lodge.
2014/2435	Land To North Of Hill Farm House Yarmouth Road Gillingham Norfolk NR34 0EE	Install two wind turbines.

Planning application numbers 2018/0485 and 2017/2186 was for a change of use of an agricultural building and included bat roost assessment which concluded that the building was unsuitable for bats and that given the small scale of the development the impact would be negligible on other protected species.

Planning application number 2018/0742 for the demolition and replacement of a building, included a Bat Survey which concluded that two of the buildings were bat roosts.

Planning application number 2017/1713 for a Barn conversion included a Bat Survey which concluded that the building was a brown long eared bat roost and mitigation would be required.

Planning application number 2015/2159 was for Change of use of an agricultural building and included a letter from the Ecologist at Norfolk County Council which concluded that the building was unsuitable for bats and no ecological constraints were required.

Planning application number 2015/0746 was for the erection of an agricultural building and which included a letter from the Ecologist at Norfolk County Council which concluded that as the adjacent ancient woodland should not be impacted and there was unlikely to be an ecological impact.

Planning application number 2014/2522 for a Three Bay Cart Lodge, included a letter from the Ecologist at Norfolk County Council which concluded that, as any impact on Great Crested Newts was likely to be very low no licence was required.

Planning application number 2014/2435 was to install two wind turbines and included a letter from the Ecologist at Norfolk County Council which concluded the likely impacts on ecology were considered minimal.

In summary other local ecological surveys have highlighted no issues in the area.