

PENNINE



ecological

**GREAT CRESTED NEWT
PRESENCE & ABSENCE SURVEY**

- Blainscough Hall, Coppull, Lancashire -

GREAT CRESTED NEWT PRESENCE & ABSENCE SURVEY

- Blainscough Hall, Coppull, Lancashire -

A report for

LeaHough

CHARTERED SURVEYORS

Oakshaw House,
2 Capricorn Park,
Blakewater Road,
Blackburn,
Lancashire,
BB1 5QR

Report authors



PENNINE Ecological

24 The Highgrove
Heaton
Bolton
BL1 5PX

Tel: 01204 844545

email: bob@pennineecological.co.uk

web: www.pennineecological.co.uk

Robert N. Leatham B.Sc. (Hons.), P. dip.
&
Patrick Leatham BSc (Hons), MCIEEM.

May 2021

GREAT CRESTED NEWT PRESENCE & ABSENCE SURVEY

- Blainscough Hall, Coppull, Lancashire -

CONTENTS	PAGE NO.
PART 1 INTRODUCTION	
1.1 Introduction.....	4
1.2 Site Location	4
1.3 Site Status	4
1.4 Survey Methodology.....	4
1.5 Survey Constraints	6
PART 2 SURVEY RESULTS	
2.1 Great Crested Newt Survey Results.....	7
PART 3 CONCLUSIONS	
3.1 Conclusions.....	9
PART 4 REFERENCES	
4.1 References.....	10

APPENDIX 1: *Map 1: Map to show Ponds Surveyed.*

PART 1. INTRODUCTION

1.1 INTRODUCTION:

PENNINE *Ecological* have been commissioned by NJL Consulting to undertake a great crested newt 'Presence and Absence Survey' and where applicable a 'Population Size Class Assessment' of ponds near to Blainscough Hall, Coppull.

The great crested newt (*Triturus cristatus*) is comprehensively protected by European legislation.

Two ponds were identified as requiring survey following the completion of the Extended Phase 1 Habitat Survey in July 2020 (See Map 1, Appendix 1).

This report presents the results of the Great Crested Newt (GCN) survey. Surveys were completed on 8th/9th April, 14th/15th April, 26th/27th April and 10th/11th May 2021. The surveys were undertaken by Patrick Leatham BSc (Hons), MCIEEM, Great Crested Newt CL08 licence number: 2015-18019-CLS-CLS

1.2 SITE LOCATION:

The site is located south of Coppull village. The site primarily comprises intensively managed agricultural land, with hedgerows and strips of woodland. A small stream with a wooded riparian corridor runs along the eastern boundary of the site and separates Blainscough Nature Reserve from the site. A car scrap yard and Blainscough Hall are located south of the site. One of the ponds subject to survey is located within the site boundary (Pond 1) and another is located approximately 12m east, within Blainscough Nature Reserve (Pond 2).

The pond locations in relation to the site are shown on Map 1, Appendix 1.

1.3 SITE STATUS:

The site and surveyed ponds have no statutory or non-statutory wildlife designation. There are no designated sites within 500m of the site.

Great crested newt have been recorded within 500m of the site, approximately 224m west of the site on the other (western) side of the A49. As the road is considered to be a barrier to dispersal for GCN this pond has been scoped out for further survey and is not considered further within this report.

1.4 SURVEY METHODOLOGY

A total of two ponds were selected for requiring surveys. These are ponds that fall within 250m of the Blainscough Hall and that are considered to be ecologically connected to the site for GCN.

The survey methods applicable to the study are provided below;

1.4.1 Presence and Absence Survey (English Nature 2001):

This survey methodology applied to all ponds and was the standard 'Presence and Absence Survey' English Nature (2001).

The amphibian surveys comply with all requirements of English Nature (2001) guidelines as set out in the publication 'Great Crested Newt Mitigation Guidelines', English Nature (August 2001). The survey method is 'Presence / absence survey' as detailed on page 26, section 5.7.1.1 of the above guidelines.

'Presence / absence' surveys may determine presence although it is virtually impossible to demonstrate absence. However the aim of this method is to employ a reasonable level of effort that, at the majority of ponds, will detect the presence of great crested newts.

The 'presence/absence' survey requires that three survey methods (preferably torch survey, bottle trapping and egg search) are completed for each visit. There should be four visits in suitable weather conditions, between mid-March and mid-June, with at least two of these visits during mid-April to mid-May.

The survey methods are briefly described as follows;

1.4.1.1 Egg search:

Egg searches (but not egg counts) of all suitable vegetation in the ponds was undertaken to determine breeding presence or absence of newt species.

1.4.1.2 Bottle trapping:

Two litre sized plastic bottles were set with fixing canes at dusk. The traps were set at 2 metre intervals within the pond where possible. Night-time temperatures were above the minimum requirement of 5 °C for each survey. The traps were then checked early the following morning and all trapped animals released immediately. The total number of traps set in each pond are provided below:

Pond Ref	Visit 1 No. Traps	Visit 2 No. Traps	Visit 3 No. Traps	Visit 4 No. Traps
Pond 1	10	10	5 (pond drying out)	10
Pond 2	10	10	10	10

1.4.1.3 Night time torch counts:

Night time torch counts were undertaken when weather conditions were suitable (i.e. relatively calm with little wind and no rain). Night-time air temperatures were above the minimum requirement of 5 °C for each survey. The climatic and environmental conditions were recorded during each survey, together with all amphibian sightings.

Torch counts were undertaken in conditions of total darkness, after sunset, using specialist high powered, Clulite 'Smartlite' torches, at an intensity of 1,000,000 candle power.

1.5 SURVEY CONSTRAINTS:

No constraints to surveys were encountered.

PART 2. SURVEY RESULTS

2.1 SURVEY RESULTS:

2.1.2 POND 1 SURVEY RESULTS (SD 5599 1369)

Egg Search:

Date of Survey	Results
09/04/2021	No eggs recorded
15/04/2021	No eggs recorded
27/04/2021	No eggs recorded
11/05/2021	No eggs recorded

Night Time Torch Counts:

Date of Survey	Air Temp	Wind Strength	Weather Conditions	Water Turbidity*	Aquatic Macrophyte Cover**	Results
08/04/2021	8°C	Calm	Dry, Clear	2	1	No records
14/04/2021	9°C	Calm	Dry, Clear	2	1	No records
26/04/2021	9°C	10mph	Dry, Overcast	2	2	No records
10/05/2021	12°C	15mph	Showers	2	2	No records

*Water turbidity score provided on a scale of 0-5 based on the Natural England GCN method statement. 0 = Completely clear, and 5 = very turbid.

** Aquatic macrophyte cover provided on a scale of 0-5 based on the Natural England GCN method statement. 0 = no vegetation obscuring survey, and 5 = water completely obscured by vegetation.

Bottle Trapping:

Date of Survey	Setting Air Temp (PM)	Overnight Minimum Air Temp	Checking Air Temp (AM)	Bottle Trap Count
08/04/2021 09/04/2021	10°C	5°C	6°C	No records
14/04/2021 15/04/2021	9°C	5°C	9°C	No records Small fish captured
26/04/2021 27/04/2021	10°C	8°C	10°C	No records
10/05/2021 11/05/2021	12°C	6°C	9°C	No records Small fish captured

2.1.3 POND 2 SURVEY RESULTS (SD 5603 1364)

Egg Search:

Date of Survey	Results
09/04/2021	Smooth/palmate eggs

*Great Crested Newt Presence & Absence Survey
- Blainscough Hall, Coppull -*

Date of Survey	Results
15/04/2021	Smooth/palmate eggs
27/04/2021	Smooth/palmate eggs Frog spawn/tadpoles
11/05/2021	Smooth/palmate eggs Toadpoles

Night Time Torch Counts:

Date of Survey	Air Temp	Wind Strength	Weather Conditions	Water Turbidity *	Aquatic Macrophyte Cover**	Results
08/04/2021	8°C	Calm	Dry, Clear	1	3	No records
14/04/2021	9°C	Calm	Dry, Clear	1	3	1 female smooth/ palmate newt 2 male smooth/palmate newt
26/04/2021	9°C	10mph	Dry, Overcast	1	3	2 male smooth/palmate newt
10/05/2021	12°C	15mph	Showers	1	3	7 female smooth/ palmate newt 2 male smooth/palmate newt

*Water turbidity score provided on a scale of 0-5 based on the Natural England GCN method statement. 0 = Completely clear, and 5 = very turbid.

** Aquatic macrophyte cover provided on a scale of 0-5 based on the Natural England GCN method statement. 0 = no vegetation obscuring survey, and 5 = water completely obscured by vegetation.

Bottle Trapping:

Date of Survey	Setting Air Temp (PM)	Overnight Minimum Air Temp	Checking Air Temp (AM)	Bottle Trap Count
08/04/2021 09/04/2021	10°C	5°C	6°C	No records
14/04/2021 15/04/2021	9°C	5°C	9°C	1 male palmate newt 1 female palmate newt
26/04/2021 27/04/2021	10°C	8°C	10°C	4 male palmate newts 3 female palmate newts 2 male smooth newts
10/05/2021 11/05/2021	12°C	6°C	9°C	2 female palmate newts >50 toadpoles

PART 3. CONCLUSIONS

3.1 CONCLUSIONS

The surveys have detected a **likely absence of GCN** from the two ponds subject to survey.

No amphibians were recorded within Pond 1. This pond contained small fish which have likely colonised the pond from the adjacent brook. Fish can predate on amphibian eggs and reduce the suitability of a water body to support amphibian species, including GCN.

Pond 2 is confirmed to support at least four amphibian species and is used for breeding by all four species:

- Palmate Newt – small population with a peak count of 9 individuals recorded during visit 4 (10/05/2021).
- Smooth Newt – small population with a peak count of 9 individuals recorded during visit 4 (10/05/2021).
- Common Frog – >50 tadpoles recorded during visit 3 (27/04/2021).
- Common Toad - >50 toadpoles recorded during visit 4 (11/05/2021).

PART 4. REFERENCES

4.1 REFERENCES

English Nature (2001) *Great Crested Newt Mitigation Guidelines*, English Nature.

English Nature Research Report 575 (2004); An evaluation of the effectiveness of great crested newt *Triturus cristatus* mitigation projects in England, 1990 – 2001. (PENNINE Ecological were contributors to this study).

Froglife (2001) *Great Crested Newt Conservation Handbook*. Froglife.

Joint Nature Conservation Committee, (1998) *Herpetofauna Workers' Manual*. JNCC, Peterborough.

APPENDIX 1:

*Map 1:
Map to Show Locations of Ponds Surveyed.*

