

Tension Control Bolts Site, Wrexham, LL13 9XS

GREAT CRESTED NEWT SURVEY RAW DATA

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[ERAP (Consultant Ecologists) Ltd ref: 2019-079c]

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Document Control

Survey Type:	Surveyors¹	Survey Date(s)
Great crested newt surveys	Jordan Prendergast and assistant	May to June 2019
Reporting	Personnel	Date
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Report issued to	C4 Projects	
Version Number	1	
¹ Licence reference number		
Victoria Burrows Natural Resources Wales Licence Number S086006/1 (valid until 31 st March 2021)		

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by C4 Projects to carry out an ecological appraisal of Tension Control Bolts Site, Wrexham, LL13 9XS (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SJ 3702 4940.
- 1.1.2 The appraisal was requested in connection with a planning application to extend the existing industrial units.
- 1.1.3 The results of an ecological appraisal (including an environmental DNA (eDNA) survey) are presented at *2019-079 Tension Control Bolts Site, Wrexham, LL13 9XS* (ERAP (Consultant Ecologists) Ltd, 2019).
- 1.1.4 This report is provided to present the raw data of the great crested newt population size class assessment surveys undertaken at the site.

2.0 METHOD OF SURVEY

2.1 Great Crested Newt Population Size Class Assessment

- 2.1.1 Surveys to determine the population size class of great crested newt at Pond 1 were undertaken. The licensed great crested newt presence/absence survey of the ponds commenced in May 2019.
- 2.1.2 The surveys were carried out in accordance with the *Great Crested Newt Mitigation Guidelines* (English Nature, 2001) and comprised application of the following methods:
 - a. **Torchlight searches:** This involved shining a powerful torch (Clulite CB2 and Clulite CLU10, both 1,000,000 candle power) into the pond margins at night during suitable weather conditions (above 5°C), identifying the amphibian species and counting the number of each species of amphibian;
 - b. **Egg Search:** Submerged, emergent and water-margin vegetation, including the leaves of terrestrial plants that had fallen into the water, was checked in daylight for the presence of great crested newt eggs. The egg searches were used to determine presence or absence only; eggs were not counted because opening the leaves enclosing the eggs can expose the eggs and developing newt larvae to predators and to other threats. Care was taken at all times to ensure that the eggs were not left exposed or damaged;
 - c. **Bottle Trap Surveys:** Bottle traps constructed from two litre plastic bottles were set around the pond at a spacing of one trap every 2 metres. An air bubble was always provided to ensure that newts and other amphibians did not drown. The traps were set and left overnight during suitable weather (above 5°C). The traps were emptied the following morning and all captured amphibians were recorded and returned to the pond;
 - d. **Terrestrial Searches:** In addition to the surveys of the aquatic habitats suitable debris throughout the site and the surrounding area (particularly in close proximity to the pond) was lifted and searched for the presence of amphibians; and
 - e. **Netting:** Long handled pond nets (20 millimetre in diameter with a three millimetre mesh size) were used for sampling the pond margins for amphibians where access was possible.
- 2.1.3 All great crested newt surveys were conducted during suitable weather conditions. All detected amphibians were identified to species level and sexed.
- 2.1.4 Great crested newt surveys were completed by Jordan Prendergast and an assistant under Victoria Burrows' survey licence Natural Resources Wales Licence Number S086006/1 (valid until 31st March 2021).

3.0 SURVEY RESULTS

3.1 Great Crested Newt Population Size Class Assessment Results

Table 3.1: Great Crested Newt Population Size Class Assessment Survey Results, Tension Control Bolts Site, Pond 1

Survey Method	Rep. No.	Date of Result	Min. Overnight Air Temp. (°C)	Vegetation Cover (0 – 5)	Turbidity (0 – 5)	GCN			SN			PN			CF	CFT	CT	CTT	Fish
						M	F	Im	M	F	Im	M	F	Im					
Bottle Trap	1	15/05/2019	9	1	3	2	2	0	5	8	0	0	0	0	0	0	0	0	0
	2	16/05/2019	7	1	3	3	4	0	6	11	0	0	0	0	0	0	0	0	0
	3	17/05/2019	9	1	3	5	7	0	5	9	0	0	0	0	0	0	0	0	0
	4	23/05/2019	10	1	3	3	6	0	8	5	0	0	0	0	0	0	0	0	0
	5	30/05/2019	15	1	3	2	3	0	7	8	0	0	0	0	0	0	0	0	0
	6	07/06/2019	9	1	4	4	4	0	4	6	0	0	0	0	0	0	0	0	0
Torchlight	1	14/05/2019	9	1	3	5	7	0	4	7	0	0	0	0	0	0	0	0	0
	2	15/05/2019	7	1	3	13	11	0	15	9	0	0	0	0	0	0	0	0	0
	3	16/05/2019	9	1	3	10	7	0	6	2	0	0	0	0	0	0	0	0	*
	4	22/05/2019	10	1	3	6	6	0	3	8	0	0	0	0	0	0	0	0	0
	5	29/05/2019	15	1	3	4	5	0	5	7	0	0	0	0	0	0	0	0	*
	6	06/06/2019	9	1	4	2	11	0	2	13	0	0	0	0	0	0	0	0	0
Egg Search	1	14/05/2019	9	1	3	0			0			0			0	0	0	0	0
	2	15/05/2019	7	1	3	0			0			0			0	0	0	0	0
	3	16/05/2019	9	1	3	0			0			0			0	0	0	0	0
	4	22/05/2019	10	1	3	0			0			0			0	0	0	0	0
	5	29/05/2019	15	1	3	0			0			0			0	0	0	0	0
	6	06/06/2019	9	1	4	P			0			0			0	0	0	0	0

KEY: GCN = great crested newt, SN = smooth newt, PN = palmate newt, CF = common frog, CFT = common frog tadpole, CT = common toad, CTT = common toad tadpole, M = male, F = female, Im = immature. Fish and Tadpoles: * = 1 – 10, ** = 11 – 100 and *** = 100+ – 1000's
Vegetation Cover and Turbidity: 0 = low, i.e. good visibility and 5 = high, i.e. very poor visibility.

Notes: 25 traps used for survey repetition 1 to 3, 23 traps used for survey repetition 4 and 5 and 22 traps used for survey repetition 6.

4.0 REFERENCES

English Nature, 2001. *Great Crested Newt Mitigation Guidelines*. Peterborough: English Nature.

ERAP (Consultant Ecologists) Ltd, 2019. *2019-079 Tension Control Bolts Site, Wrexham, LL13 9XS*, Preston: ERAP (Consultant Ecologists) Ltd.

Great Britain, 1981. *Wildlife and Countryside Act*. London: H.M.S.O.

5.0 APPENDIX: FIGURE

Figure 1: Google Earth Image to Illustrate the Site Boundary and Pond Locations

