
Convatec Green Manufacturing Hub

Appendix 11.2: Protected Species



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ANNEXES

Annex 1: Scientific Names

1 INTRODUCTION

- 1.1.1 This Appendix has been prepared to accompany **Chapter 11: Ecology** of the Convatec Green Manufacturing Hub (the 'Proposed Development') Environmental Statement (ES).
- 1.1.2 It presents detailed methodologies and results of desk studies and field surveys completed to establish baseline conditions with regards protected and notable species (excl. bats, vegetation, and birds which are respectively considered separately in **Appendix 11.3**, **Appendix 11.1** and **Appendix 12.1**) and should be read with reference to the following figures (presented in **Volume X** of the ES Report):
- **Figure 11.1a:** Ecological Statutory Designated Sites;
 - **Figure 11.1b:** Ecological Non-statutory Designated Sites;
 - **Figure 11.2a:** Existing Ecological Records (Non-Sensitive) – Priority Species; and,
 - **Figure 11.5** – Protected Species Survey Plan.
- 1.1.3 Only common species names are used throughout this appendix. Scientific names for all species referenced are supplied in **Annex 1**.

2 METHODOLOGY

2.1 Desk Study and Consultation

- 2.1.1 The desk study has included a review of the following key sources summarised in **Table 2.1**.
- 2.1.2 Additional peer reviewed literature and industry guidance has also been reviewed and is referred to where relevant.
- 2.1.3 Details of all consultation undertaken in relation to ecology is presented in **Table XX** of **Chapter 11: 'Ecology'** in **Volume xx** of the ES.

Table 2.1: Desk study key sources and information sought.

Key Source	Date of Consultation	Information Sought	Study Area
Natural Resources Wales website https://naturalresources.wales/?lang=en	December 2023	Proximity to statutory designated sites, with protected species interests.	Within 10km of the Site. Shown in Figure 11.1a .
South East Wales Biodiversity Records Centre (SEWBReC)	December 2023	Existing ecological records ¹ , including non-statutory sites.	Within 2km of grid reference of approximate centre of the Site (SO 10027 08382). Shown in Figures 11.1b and 11.2a .

¹ From the last ten years (since 2013), unless otherwise stated, and provided for context, in relation to 'historic' presence.

NRW datamap https://datamap.gov.wales/layers/geonode:GWC21_Great_Crested_Newts	January 2024	Proximity to potential habitat for great crested newt.	Within 2km of the Site.
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2.2 Field Surveys

- 2.2.1 As part of the phase 1 habitat survey, on 28th to 31st August 2023, the survey area (which comprised all land within the Site, and also habitats extended to 100m from the infrastructure and 250m from turbines), was searched for evidence, or potential presence, of protected species, including the presence of habitat types that might provide suitable breeding or refuge areas. The results from the survey, determined whether additional targeted protected species surveys were required.
- 2.2.2 Furthermore, anecdotal records of (or potential for) protected species were made during other field surveys, including the ornithology surveys (see details of these surveys in **Appendix 12.1**).
- 2.2.3 The extended phase 1 habitat survey was conducted by C. Davies, and all other ecology surveys (and ornithology surveys) were conducted by S. Shutt, who are both suitably qualified and experienced field ecologists, proficient in the identification of protected species and habitat appraisals for protected species.
- 2.2.4 All surveys were undertaken in conditions conducive to the survey of protected species, including normal flow conditions of on-Site watercourses and not undertaken after periods of heavy rain.

Limitations

- 2.2.5 No limitations were encountered during the field surveys.

3 RESULTS

3.1 Desk Study

- 3.1.1 This section provides details of existing ecological information and existing records of protected, notable and invasive species identified within and in proximity to the Site from desk study sources listed in **Table 2.1**.

Statutory Designated Sites for Nature Conservation

- 3.1.2 This section should be read with reference to **Figure 11.1a**².
- 3.1.3 A review of the 'MAGIC' and NRW websites identifies that the Site does not form part of any statutory designated site for nature conservation with qualifying ecological features.
- 3.1.4 Nant Glais Caves Site of Special Scientific Interest (SSSI) is designated for white trout and is located 5.45km north-west of the Site.

² Note, some designated sites on **Figure 11.1a** have other ecology, but no protected species qualifying interest.

- 3.1.5 Talybont Reservoir Local Nature Reserve (LNR) is 8.58km north of the Site and is a large stillwater reservoir with a large wild brown trout population.
- 3.1.6 There are no statutory sites, within 10km of the Site, that are designated for qualifying mammal features.

Non-statutory Designated Sites for Nature Conservation

- 3.1.7 This section should be read with reference to **Figure 11.1b**.
- 3.1.8 The records provided by SEWBRc indicated that there are six non-designated sites for nature conservation within 2km of the Site (see **Table 3.1**). The records also report that the Site is located as part of a Buglife 'B-Line'³; a route selected for a wildlife corridor restoration project. The full list of the non-statutory sites is provided in **Appendix 11.1**.
- 3.1.9 Of these, Cefn Gelligaer Site of Importance for Nature Conservation (SINC), which adjoins the southern Site boundary, is notable for supporting local populations of dragonflies in pond habitats.
- 3.1.10 The River Rhymney SINC, situated 160m east of the Site, is notable for supporting probable breeding otters, resident bullhead and brown trout populations and migratory Atlantic salmon and sea trout.
- 3.1.11 Pan March and Traed y Milwyr, Llechryd SINC, situated 500m north of the Site is stated as having potential value for reptiles.
- 3.1.12 Tair Carreg Moor, north west of Fochriw SINC, situated 980m south-west of the Site, is also notable for supporting local populations of dragonflies in pond habitats.

Existing Protected and Notable (Priority) Species Records

- 3.1.13 A summary of the protected and notable (priority) species records from SEWBRc is provided in **Table 3.1**. Records are presented in **Figure 11.2a**. Records of bats are provided in **Figure 11.2a** (non-roost records), and bat roost records in **Confidential Figure C11.1**, with further information provided in **Appendix 11.3**.
- 3.1.14 No protected or notable (priority) species records within the Site were returned.

Table 3.1: Desk study records returned by SEWBRc.

Priority Species	No. of Records (and dates)	Status	Notes
Brown hare	Seven (2016 - 2022)	S7; LBAP	Nearest c.440m north.
Badger	Two (2013)	PBA; LBAP	Roadkill records in Rhymney.
Otter	Two to four (2017-2021)*	WCA; HabReg; S7; LBAP	Both relate to spraints recorded c.825m north-east in the River Rhymney.
Hedgehog	Eight (2014 - 2022)	S7	Nearest c.470m east.
Common frog	Seven (2017 – 2021)	LBAP	Closest record c.830m south-west in Rhaslas Pond.
Common toad	Three (2018 - 2020)	S7; LBAP	Closest record c.920km south-west in Rhaslas Pond.

³ Buglife (2024). *B-Lines*. Available online: <https://www.buglife.org.uk/our-work/b-lines/> (Accessed 29/01/2024).

Priority Species	No. of Records (and dates)	Status	Notes
Palmate newt	Eight (2017 - 2022)	LBAP	Closest record identified c.500m south-west near Rhaslas Pond.
Common lizard	Four (2020 – 2022)	WCA5; S7; LBAP	Closest record c.1.1km south-west.
Great crested newt	Seven 'historic' records (4 x 1986, 1 x 2010-2011, 2 x 2003)	WCA; HabReg; S7; LBAP	Nearest is c.350m west (1986 record), with the latest record (2010-11), 1.9km south.
Slow-worm	Two historic records (2009)	WCA5; S7; LBAP	Both records c.145m north-east.
White-clawed crayfish	Two (2018)	WCA5; S7; LBAP	Nearest c.1.82km south.
Azure damselfly	Four (2018, 2020)	LBAP	Nearest record c.1.3km south
Black darter	Eight (2004-2013, 2014)	LBAP	Nearest record c.1.25km south
Black-tailed skimmer	One (2020)	LBAP	c.460m north.
Blue-tailed damselfly	14 (2004-2020)	LBAP	Nearest c.460m north.
Broad-bodied chaser	Two (2018, 2020)	LBAP	Nearest record c.740m south.
Common blue damselfly	Nine (2004-2013, 2016-2018, 2020, 2022)	LBAP	Nearest c.460m north.
Common darter	Eight (2004-2020)	LBAP	Nearest c.460m north.
Common hawk	Five (2006-2020)	LBAP	Nearest record c.1.65km south.
Emerald damselfly	Five (2004-2020)	LBAP	Nearest c.460m north.
Emperor dragonfly	Seven (2014-2020)	LBAP	Nearest c.460m north.
Four-spotted chaser	Five (2018, 2020)	LBAP	Nearest c.460m north.
Golden-ringed dragonfly	Three (2017, 2019, 2020)	LBAP	Nearest record c.740m south.
Keeled skimmer	Three (2020, 2022)	LBAP	Nearest record c.740m south.
Large red damselfly	Eleven (2009-2020, 2022)	LBAP	Nearest c.460m north.
Migrant hawk	Four (2012, 2013, 2019)	LBAP	Nearest c.540m north.
Scarce blue-tailed damselfly	One (2022)	LBAP	c.875m north-west.
Grayling	Seven (2018 - 2022)	S7	Closest record identified c.1.25km south-west.

Priority Species	No. of Records (and dates)	Status	Notes
Marsh fritillary	One (2021)	S7; LBAP	Identified >4km west.
Small heath	18 (2014 - 2022)	S7	Closest record identified c.390m south.
Small pearl-bordered fritillary	Ten (2015 – 2018)	S7	Closest record c.1.10km south-west.
Wall	Two (2017 – 2019)	S7	Closest record c.680m south near Rhaslas Pond.
Cinnabar	Three (2019 – 2021)	S7	Closest record c.645km north.
Narrow-bordered bee hawk-moth	One (2019)	S7	Identified c.135km south-west.

WCA: Wildlife and Countryside Act (1981) – full protection; WCA5 – protection against intentional killing, injuring or taking & prohibits their possession and trade; HabReg: The Conservation (Natural Habitats, &c.) Regulations 2010; S7: Environment (Wales) Act 2016; PBA: Protection of Badgers Act (1992); LBAP: Caerphilly Local Biodiversity Action Plan⁴.

* Three unspecified records identified between 2009 and 2017 and one in 2021.

- 3.1.15 Review of the NRW datamap identified that some of the southern areas within the Site have potentially suitable habitats for great crested newt. Further areas located directly west of the Site and south at Rhaslas Pond were also identified as potentially suitable for the species. Note, these areas are typically indicative of the location of the historic great crested newt records summarised in **Table 3.1**.

3.2 Field Surveys

- 3.2.1 No evidence of protected and notable species was recorded during the extended Phase 1 habitat survey.
- 3.2.2 Eight records of brown hare were identified between May and June 2022 (see **Figure 11.5**). Of these, three records of brown hare were identified within the Site itself, which included a leveret in a form. Brown hare is therefore confirmed to breed within on-Site habitats.
- 3.2.3 The potential for habitats within the Site, including woodland, hedgerows and grassland to be used by protected and notable (priority) species, such as badger and hedgehog cannot be discounted. The ditches on-Site were all dry during the surveys and thus are considered unsuitable for species like otter, water vole and white-clawed crayfish. Watercourses in the surrounding area (like River Rhymney) are likely to support such riparian species.
- 3.2.4 An overgrown disused shaft with limited open water was identified within the Site, with details provided in **Appendix 11.1**. This feature is c.375m from the nearest proposed turbine, and c.55m from the access track. The shaft is considered unlikely to support great crested newts, due to the limited extent of open water, lack of optimal surrounding terrestrial habitat, considerable distance (>500m)

⁴ <https://www.caerphilly.gov.uk/caerphillydocs/planning/biodiversity-action-plan-caerphilly-county-borough.aspx> (Accessed 29/01/2024)

from other waterbodies, and lack of great crested newt desk study records in the last ten years (with none of the historic records related to this shaft⁵).

⁵ The most recent great crested newt record (from 2010-2011) c.1.9km from the Site.

ANNEX 1: SCIENTIFIC NAMES

Table A1.1 provides common and scientific names of priority species included in this appendix.

Common Name	Scientific Name
Badger	<i>Meles meles</i>
Brown hare	<i>Lepus europaeus</i>
Hedgehog	<i>Erinaceus europaeus</i>
Otter	<i>Lutra lutra</i>
Water vole	<i>Arvicola amphibius</i>
Common frog	<i>Rana temporaria</i>
Common toad	<i>Bufo bufo</i>
Palmate newt	<i>Lissotriton helveticus</i>
Great crested newt	<i>Triturus cristatus</i>
Common lizard	<i>Zootoca vivipara</i>
Slow-worm	<i>Anguis fragilis</i>
White-clawed crayfish	<i>Austropotamobius pallipes</i>
Azure damselfly	<i>Coenagrion puella</i>
Black darter	<i>Sympetrum danae</i>
Black-tailed skimmer	<i>Orthetrum cancellatum</i>
Blue-tailed damselfly	<i>Ischnura elegans</i>
Broad-bodied chaser	<i>Libellula depressa</i>
Common blue damselfly	<i>Enallagma cyathigerum</i>
Common darter	<i>Sympetrum striolatum</i>
Common hawk	<i>Aeshna juncea</i>
Scarce blue-tailed damselfly	<i>Ischnura pumilio</i>
Emerald damselfly	<i>Lestes sponsa</i>
Emperor dragonfly	<i>Anax imperator</i>
Four-spotted chaser	<i>Libellula quadrimaculata</i>
Golden-ringed dragonfly	<i>Cordulegaster boltonii</i>
Keeled skimmer	<i>Orthetrum coerulescens</i>
Large red damselfly	<i>Pyrrhosoma nymphula</i>
Migrant hawk	<i>Aeshna mixta</i>
Grayling	<i>Hipparchia semele</i>
Marsh fritillary	<i>Euphydryas aurinia</i>
Small heath	<i>Coenonympha pamphilus</i>
Small pearl-bordered fritillary	<i>Boloria selene</i>
Wall	<i>Lasiommata megera</i>
Cinnabar	<i>Tyria jacobaeae</i>
Narrow-bordered bee hawk-moth	<i>Hemaris tityus</i>
Atlantic salmon	<i>Salmo salar</i>

Common Name	Scientific Name
Trout (sea, brown & white)	<i>Salmo trutta</i>
Bullhead	<i>Cottus gobio</i>