

## **DORMOUSE SURVEY**

# Land off Parc y Delyn, Carmarthen, Carmarthenshire



December 2021

Client:	I&G Ecological Consulting
Site Name:	Land off Parc y Delyn, Carmarthen, Carmarthenshire
Grid reference:	SN411209 centroid
Report:	Dormouse Survey
Date of survey:	May - November 2021
Surveyed by:	Siân Musgrave BSc (Hons), MCIEEM (NRW Licence number
	S087396/1 and S090519/1) and assistant Wendy Larcombe

Issue:	Revision:	Stage:	Date:		Prepare	d by:	Approved by:
1	_	Draft for	8 <sup>th</sup>	December	Siân	Musgrave	D Sazer
		review	2021		BSc	(Hons)	
					MCIEEN	I, AEC Ltd	
2	n/a	Final	13 <sup>th</sup>	December	Siân	Musgrave	
			2021		BSc	(Hons)	
					MCIEEN	M, AEC Ltd	

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This report should not be submitted as part of a planning application without any accompanying species-specific reports which may have been recommended herein.

Data within this report is valid for a maximum of twelve months from the date of the survey. After this period, an updated site visit will be required to determine a new ecological baseline. The results of the survey and assessment work undertaken by Amber Environmental Consultancy Ltd are representative at the time of surveying. Every effort has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey, records obtained from local record centres (where available) and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural Resources Wales and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on site. Amber Environmental Consultancy Ltd cannot accept responsibility for data collected from third parties.

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## Summary

A Dormouse survey has been requested for land off Parc y Delyn, Carmarthen to inform a planning application for residential housing.

The development site is approximately 1.2 hectares in size, but the adjacent land to the north was included in the survey since it is part of the same block of potential dormouse habitat. It consists of a small area of grassland bordered by scrub, bracken and hedgerows with single trees scattered within. The scrub (mainly bramble, but also some bracken and saplings) has grown out extensively from the boundaries, limiting access to the boundaries.

The site is well connected to adjacent hedgerows and boundaries to the south and north east, with hedgerows along the western side of Penlan Road which dormice could access from overhanging trees in places. In the wooded areas of the boundaries in the south and east, there is good aerial connectivity and plenty of bramble scrub for dormice on the ground between.

In May 2021 forty-seven dormouse survey tubes were placed at approximately 20m intervals along the woodland and hedgerow boundaries and within the brambles inside the site. The tubes were checked once a month and removed at the end of November.

Dormice are not known to be present within a 2km radius of the site.

No dormice or field signs of dormice were found during the survey. It is unlikely that dormouse is using the site on a regular basis.

Provided that a large margin (5m) of scrub/bramble is retained along the boundaries of the woodland and hedgerows around the site, and connectivity to the wider landscape of woodland, scrub and hedges is maintained, no further mitigation for dormouse is recommended.

## 1. Introduction and background to the site

- 1.1 Amber Environmental Consultancy Ltd was commissioned by I&G Ecological Consulting in May 2021 to undertake a Hazel dormouse *Muscardinus avellanarious* survey on land off Parc y Delyn, Carmarthen to accompany a planning application for residential development.
- 1.2 A Preliminary Ecological Assessment was undertaken by I&G Ecological Consulting in 2020, which concluded that "The native hedgerows and areas of dense bramble scrub provide suitable, but sub- optimal habitat for dormice. However, there are no records for the species in the wider area, and further survey is not considered justified. The retention and improvement of suitable habitat and connectivity as part of the scheme, together with a watching brief is recommended. "
- 1.3 However, a dormouse survey was requested, and this report provides the methodology and findings of the survey, which was undertaken May November 2021.

#### Site description

- 1.4 The site is situated adjacent to Penlan Road to the west, Parc y Delyn to the south, Heol y Delyn to the east and fields to the north.
- 1.5 The development site is approximately 1.2 hectares in size but the adjacent land to the north was included in the survey since it is part of the same block of potential dormouse habitat. It consists of a small area of grassland bordered by scrub, bracken and hedgerows with single trees scattered within. The scrub (mainly bramble, but also some bracken and saplings) has grown out extensively from the boundaries, limiting access to the boundaries.
- 1.6 The site is well connected to adjacent hedgerows and boundaries to the south and north east, with hedgerows along the western side of Penlan Road which dormice could access from overhanging trees in places. In the wooded areas of the boundaries in the south and east, there is good aerial connectivity and plenty of bramble scrub for dormice on the ground between.
- 1.7 The site has a central grid reference of SN 411209 and lies within the administrative authority area of Carmarthenshire. **Figure 1** shows the site in its wider context and **Figure 2** the site plan.
- **Figure 1**: The area containing the site in its wider context (approximately) outlined in red (Google Earth Image /Getmapping plc 2021).



Figure 2: Site Plan (site survey boundary in red, development area in blue)



## 2. Legislation

- 2.1 The Hazel dormouse *Muscardinus avellanarius* and its habitats are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019), the Wildlife and Countryside Act 1981 (as amended) and are a European Protected Species (EPS). The dormouse is also a UK Biodiversity Action Plan priority species and listed in section 7 of the Environment (Wales) Act 2016 as a species of principal importance.
- 2.2 It is an offence to
  - Deliberately capture, injure, kill or disturb dormice
  - Intentionally or recklessly obstruct access to any structure/place used for shelter or protection, or
  - Damage or destroy a breeding site or resting place.

If convicted of an offence, penalties can include a fine of up to £5000 per animal and/or six months imprisonment.

2.3 An EPS licence or derogation must be obtained from Natural Resources Wales in order for any disturbance to occur.

### 3. Survey Methodology

- 3.1 The site was walked over to determine the most suitable areas for dormouse survey tube placement. The woodland edge along the south was fringed in places by a wide stretch of bracken and bramble, but some trees were accessible. The western and northern boundaries and hedges were inaccessible for most of their lengths due to the extensive bramble growth from the boundaries out into the field. Some scattered trees within the field were accessible. The eastern boundary was partially accessible, with scattered trees in clumps and dense bramble around the edges.
- 3.2 Forty-seven dormouse survey tubes were placed at approximately 20m intervals on 18<sup>th</sup> May 2021. These were placed both in lower branches of trees within reach, and around the dense bramble scrub along the edges of the grassland. Scattered trees within the grassland were only targeted if they were in clumps or had aerial connectivity with boundaries or scrub.
- 3.3 Tubes were placed on suitable limbs at varying heights in varying densities of undergrowth. Each tube was numbered and mapped using a Garmin eTrex GPS. Barrier tape was tied to nearby branches to act as a visual marker. A plan of the approximate tube locations is shown in **Figure 3**.

Figure 3: Approximate tube locations (Google Earth/Getmapping plc 2021)



- 3.4 All tubes were placed by Siân Musgrave (NRW Dormouse licence number S087396/1 and S090519/1) and inspected with/by assistant Wendy Larcombe in suitable weather in June, July, August (checked 1<sup>st</sup> September), September, October (checked 3<sup>rd</sup> November) and November 2021.
- 3.5 As the tubes were wired or cable-tied to vegetation, they were not removed on each visit, merely inspected via a mirror on a stick, (bung and bag at the ready if a nest was discovered) and the insert slid open to reveal the contents. The tubes were removed in November following the final check.
- 3.6 Nut searches were also undertaken where there was hazel in the boundaries that were accessible. Dormouse open nuts in a characteristic way with a smooth round opening and no transverse tooth marks across the rim of the shell. The ground under suitable trees bearing fruit was searched for any discarded nuts opened by dormouse.

#### 4. Results

#### **Desktop Study**

4.1 According to the previous Preliminary Ecological Appraisal undertaken in 2020, West Wales Biodiversity Information Centre (WWBIC) returned no records for dormouse within a 2km radius of the site.

4.2 The Dormouse Conservation Handbook recommends that, in order to measure adequate effort of survey where there are likely to be small/low numbers of dormice, at least 50 tubes should be placed and left for a whole season where possible. Each month is given a value for the probability of finding dormice during the survey and a score can be devised as an indicator of the thoroughness of a survey. The index is shown in **Table 1**. Assumed absence should not be based on a search effort score of less than 20 – obtained by using 50 tubes from June – November inclusive.

**Table 1**: Index of probability of finding dormice present in nest tubes in any one month (Chanin & Woods 2003)

Month	Index of probability
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2

4.3 The tubes were placed in May and the survey was conducted during June – November giving a score of 20. Although 47 tubes rather than 50 were placed due to lack of suitable vegetation, this is deemed close enough to the figure of 50 not to affect the results. Adequate survey effort has therefore been undertaken in order to detect any significant population.

#### Field Survey

- 4.4 No dormice were seen, or field signs found on any of the six visits between June and November 2021.
- 4.5 One wood mouse nest was found in tube 29 on 3 November 2021. One berry food cache typical of wood mouse was found in tube 3 on 3 November 2021.
- 4.6 A nut search was undertaken, but few of the hazel bore fruit and no dormouse-opened nuts were found. Other suitable food sources such as berries, nectar and pollen were available throughout the site, as were nesting places within areas of dense undergrowth beneath bramble.
- 4.7 Twelve tubes in total could not be re-found the majority of these were in bramble that had grown out at a prolific rate, hiding the tubes and markers from view over the season. Attempts to cut back the bramble to make the tubes more visible was done in August but some tubes remained unfound.
- 4.8 Detailed results from each of the visits can be found in **Appendix 1**.

#### 5. Assessment

- 5.1 No dormice or field signs of dormice were found during the survey. It is unlikely that dormouse is using the site on a regular basis.
- 5.2 The dense bramble with scattered trees where the tubes were sited were in places some distance from the actual field boundaries, but dormouse would be expected to use the whole habitat if present on site.
- 5.3 The site is large, with development planned for an area in the south (Figure 2). All of the site boundaries have good cover due to dense scrub and bramble which has grown out extensively into the field areas, with larger scattered trees within. Connectivity to the wider landscape can be maintained if these boundaries and a suitable buffer of scrub are maintained within the development.
- 5.4 Provided that suitable connectivity with the wider area is maintained, there should be no further mitigation needed for dormouse on this site.

#### 6. Conclusions

- 6.1 No dormice or evidence of dormice were found on the site.
- 6.2 Provided that a large margin (5m) of scrub/bramble is retained along the boundaries of woodland and hedgerows around the site, and connectivity to the wider landscape of woodland, scrub and hedges is maintained, no further mitigation for dormouse is recommended.

#### 7. References

Anon. (1981). The Wildlife and Countryside Act (1981). HMSO, London.

Anon. (2010). *The Conservation of Habitats and Species Regulations 2010*. (As amended). HMSO, London.

Bright, P., Morris, P. & Mitchell-Jones, A. (2006) *The dormouse conservation handbook 2<sup>nd</sup> edition.* English Nature, Peterborough.

NRW (2010) Dormouse Guidance Wales. NRW Bangor.

WWBIC Aderyn data search for I&G Ecological Consulting 2021

## Appendix 1: Survey results

Parc y Delyn 2021	Tubes placed 18th May		
tube no	grid ref	description	24-Jun-21
1	SN41119 20902	In hawthorn next to entrance path	0
2	SN41108 20889	In dead looking blackthorn with blackthorn scrub underneath, bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0
4	SN41099 20872	on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	0
8	SN41069 20916	on bramble on edge of field near bungalow boundary	0
9	SN41075 20926	going up penlan road boundary on oak at edge of field and brambles	0
10	SN41067 20933	in bramble at edge of field next to and behind no.9	not found
11	SN41080 20949	in bramble going up boundary of the field edge	not found
12	SN41083 20956	in bramble going up boundary of the field edge	not found
13	SN41083 20963	in bramble behind hazel below where oak comes out into field on edge of brambles on field edge	0
14	SN41085 20972	in oak on edge of field bramble patches either side another oak behind	0
15	SN41071 20989	in oak behind brambles next to road boundary	0

	T		ı
46	CN/41000 20000	in brambles in front of oak that no.15 is in	
16	SN41088 20989	on edge of field	not found
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field	0
		area	
19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	not found
21	SN41110 21035	in bramble in top corner	not found
22	SN41122 21032	brambles across top	0
23	SN41134 21022	in bramble across top	0
24	SN41149 21021	in bramble across top near oak	0
25	SN41163 21028	in oak on top corner	0
36	CN444C7 24042	in bramble going down edge of field (east) in	0
26	SN41167 21012	front of hazel to left of marker tape	0
27	SN41179 20995	in oak on eastern boundary of field area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
29	SN41161 20979	in oak with a fence running under it (v low and broken) on edge of field area	0
30	SN41161 20971	in bramble on edge of field area east side	not found
31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
31	314-1100 20303		
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
22	CN44407 20044	on oak in glade of oaks line of 4 or 5 -	
33	SN41187 20941	bottom one behind no.32	0
34	SN41181 20937	on oak in glade with no.33	0
35	SN41178 20939	on oak in glade with no.33/34	0
36	SN41163 20946	in bramble back on edge of field	not found
37	SN41145 20944	copse of oak on edge of field - back one	0
38	SN41135 20944	in copse of oaks next to no.37	0
39	SN41137 20944	in copse of oaks next to no.38	0
40	SN41130 20939	in copse on edge of field	0
41	SN41137 20933	in brambles at back of copse going down boundary	0
42	SN41130 20926	in brambles behind oak on edge of field	0
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43	SN41121 20914	in oak on edge of field directly opposite entrance path	0
44	SN41129 20909	in bramble to the I h side of entrance looking at it from the field	0
45	SN41081 20862	in sycamore opposite no.4 on other boundary	0
46	SN41072 20866	on blackthorn at bottom of start of boundary up from sycamore and no 45	0
47	SN41074 20873	on bramble next to blackthorn hedge up from no. 46	0

Parc y Delyn 2021	Tubes placed 18th May		
tube no	grid ref	description	26-Jul-21
1	SN41119 20902	In hawthorn next to entrance path	0
2	SN41108 20889	In dead looking blackthorn with blackthorn scrub underneath, bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0
4	SN41099 20872	on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	0
8	SN41069 20916	on bramble on edge of field near bungalow boundary	0
9	SN41075 20926	going up penlan road boundary on oak at edge of field and brambles	0
10	SN41067 20933	in bramble at edge of field next to and behind no.9	not found
11	SN41080 20949	in bramble going up boundary of the field edge	not found

12	SN41083 20956	in bramble going up boundary of the field edge	not found
13	SN41083 20963	in bramble behind hazel below where oak comes out into field on edge of brambles on field edge	0
14	SN41085 20972	in oak on edge of field bramble patches either side another oak behind	0
15	SN41071 20989	in oak behind brambles next to road boundary	0
16	SN41088 20989	in brambles in front of oak that no.15 is in on edge of field	not found
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field area	0
19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	0
21	SN41110 21035	in bramble in top corner	0
22	SN41122 21032	brambles across top	0
23	SN41134 21022	in bramble across top	0
24	SN41149 21021	in bramble across top near oak	0
25	SN41163 21028	in oak on top corner	0
26	SN41167 21012	in bramble going down edge of field (east) in front of hazel to left of marker tape	0
27	SN41179 20995	in oak on eastern boundary of field area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
29	SN41161 20979	in oak with a fence running under it (v low and broken) on edge of field area	0
30	SN41161 20971	in bramble on edge of field area east side	not found
31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
33	SN41187 20941	on oak in glade of oaks line of 4 or 5 - bottom one behind no.32	0
34	SN41181 20937	on oak in glade with no.33	0
35	SN41178 20939	on oak in glade with no.33/34	0

36	SN41163 20946	in bramble back on edge of field	not found
37	SN41145 20944	copse of oak on edge of field - back one	0
38	SN41135 20944	in copse of oaks next to no.37	0
39	SN41137 20944	in copse of oaks next to no.38	0
40	SN41130 20939	in copse on edge of field	0
41	SN41137 20933	in brambles at back of copse going down boundary	0
42	SN41130 20926	in brambles behind oak on edge of field	0
43	SN41121 20914	in oak on edge of field directly opposite entrance path	0
44	SN41129 20909	in bramble to the I h side of entrance looking at it from the field	0
45	SN41081 20862	in sycamore opposite no.4 on other boundary	0
46	SN41072 20866	on blackthorn at bottom of start of boundary up from sycamore and no 45	0
47	SN41074 20873	on bramble next to blackthorn hedge up from no. 46	0

Parc y Delyn	Tubes placed 18th May		
2021			
			01/09/2021 august
tube no	grid ref	description	check
1	SN41119 20902	In hawthorn next to entrance path	0
2	SN41108 20889	In dead looking blackthorn with blackthorn scrub underneath, bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0
4	SN41099 20872	on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	0

8	SN41069 20916	on bramble on edge of field near bungalow boundary	0
9	SN41075 20926	going up penlan road boundary on oak at edge of field and brambles	0
10	SN41067 20933	in bramble at edge of field next to and behind no.9	not found
11	SN41080 20949	in bramble going up boundary of the field edge	not found
12	SN41083 20956	in bramble going up boundary of the field edge	not found
13	SN41083 20963	in bramble behind hazel below where oak comes out into field on edge of brambles on field edge	0
14	SN41085 20972	in oak on edge of field bramble patches either side another oak behind	0
15	SN41071 20989	in oak behind brambles next to road boundary	0
16	SN41088 20989	in brambles in front of oak that no.15 is in on edge of field	not found
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field area	0
19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	0
21	SN41110 21035	in bramble in top corner	0
		·	
22	SN41122 21032	brambles across top	0
23	SN41134 21022	in bramble across top	not found
24	SN41149 21021	in bramble across top near oak	0
25	SN41163 21028	in oak on top corner	0
26	SN41167 21012	in bramble going down edge of field (east) in front of hazel to left of marker tape	0
27	SN41179 20995	in oak on eastern boundary of field area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
20	2.1.1220.2000	in oak with a fence running under it (v low	
29	SN41161 20979	and broken) on edge of field area	0
30	SN41161 20971	in bramble on edge of field area east side	not found

31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
33	SN41187 20941	on oak in glade of oaks line of 4 or 5 - bottom one behind no.32	
34	SN41181 20937	on oak in glade with no.33	0
35	SN41178 20939	on oak in glade with no.33/34	0
36	SN41163 20946	in bramble back on edge of field	not found
37	SN41145 20944	copse of oak on edge of field - back one	0
38	SN41135 20944	in copse of oaks next to no.37	not found
39	SN41137 20944	in copse of oaks next to no.38	0
40	SN41130 20939	in copse on edge of field	0
		in brambles at back of copse going down	
41	SN41137 20933	boundary	0
42	SN41130 20926	in brambles behind oak on edge of field	0
43	SN41121 20914	in oak on edge of field directly opposite entrance path	0
44	SN41129 20909	in bramble to the I h side of entrance looking at it from the field	0
45	SN41081 20862	in sycamore opposite no.4 on other boundary	0
46	SN41072 20866	on blackthorn at bottom of start of boundary up from sycamore and no 45	0
47	SN41074 20873	on bramble next to blackthorn hedge up from no. 46	0

Parc y Delyn Tubes placed 18th May 2021			
tube no	grid ref	description	01/09/2021 august check
1	SN41119 20902	In hawthorn next to entrance path	0
2	SN41108 20889	In dead looking blackthorn with blackthorn scrub underneath, bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0

25

SN41163 21028

0

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4	SN41099 20872	on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	0
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16	SN41088 20989	in brambles in front of oak that no.15 is in on edge of field	not found
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field area	0
19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	0
21	SN41110 21035	in bramble in top corner	0
22	SN41122 21032	brambles across top	0
23	SN41134 21022	in bramble across top	not found
24	SN41149 21021	in bramble across top near oak	0

in oak on top corner

26	SN41167 21012	in bramble going down edge of field (east) in front of hazel to left of marker tape	0
27	SN41179 20995	in oak on eastern boundary of field area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
29	SN41161 20979	in oak with a fence running under it (v low and broken) on edge of field area	0
30	SN41161 20971	in bramble on edge of field area east side	not found
31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
33	SN41187 20941	on oak in glade of oaks line of 4 or 5 - bottom one behind no.32	
34	SN41181 20937	on oak in glade with no.33	0
35	SN41178 20939	on oak in glade with no.33/34	0
36	SN41163 20946	in bramble back on edge of field	not found
37	SN41145 20944	copse of oak on edge of field - back one	0
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45	SN41081 20862	in sycamore opposite no.4 on other boundary	0
46	SN41072 20866	on blackthorn at bottom of start of boundary up from sycamore and no 45	0
47	SN41074 20873	on bramble next to blackthorn hedge up from no. 46	0

Parc y Delyn Tubes placed 18th May	
2021	<u> </u>

tube no	grid ref	description	3 nov 2021 Oct check
1	SN41119 20902	In hawthorn next to entrance path	0
2	SN41108 20889	In dead looking blackthorn with blackthorn scrub underneath, bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0 food cache
4	SN41099 20872	on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	not found
8	SN41069 20916	on bramble on edge of field near bungalow boundary	0
9	SN41075 20926	going up penlan road boundary on oak at edge of field and brambles	0
10	SN41067 20933	in bramble at edge of field next to and behind no.9	not found
11	SN41080 20949	in bramble going up boundary of the field edge	not found
12	SN41083 20956	in bramble going up boundary of the field edge	not found
13	SN41083 20963	in bramble behind hazel below where oak comes out into field on edge of brambles on field edge	0
14	SN41085 20972	in oak on edge of field bramble patches either side another oak behind	0
15	SN41071 20989	in oak behind brambles next to road boundary	0
16	SN41088 20989	in brambles in front of oak that no.15 is in on edge of field	0
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field area	0

19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	not found
21	SN41110 21035	in bramble in top corner	0
			0 fresh
22	SN41122 21032	brambles across top	leaf bed
23	SN41134 21022	in bramble across top	0
24	SN41149 21021	in bramble across top near oak	0
25	SN41163 21028	in oak on top corner	0
26	SN41167 21012	in bramble going down edge of field (east) in front of hazel to left of marker tape	not found
27	SN41179 20995	in oak on eastern boundary of field area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
29	SN41161 20979	in oak with a fence running under it (v low and broken) on edge of field area	0 wood mouse nest
30	SN41161 20971	in bramble on edge of field area east side	not found
31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
33	SN41187 20941	on oak in glade of oaks line of 4 or 5 - bottom one behind no.32	0
34	SN41181 20937	on oak in glade with no.33	0
35	SN41178 20939	on oak in glade with no.33/34	0
36	SN41163 20946	in bramble back on edge of field	not found
37	SN41145 20944	copse of oak on edge of field - back one	0
38	SN41135 20944	in copse of oaks next to no.37	0
39	SN41137 20944	in copse of oaks next to no.38	0
40	SN41130 20939	in copse on edge of field	0
41	SN41137 20933	in brambles at back of copse going down boundary	0
42	SN41130 20926	in brambles behind oak on edge of field	0
43	SN41121 20914	in oak on edge of field directly opposite entrance path	not found
44	SN41129 20909	in bramble to the I h side of entrance looking at it from the field	not found

		in sycamore opposite no.4 on other	
45	SN41081 20862	boundary	0
46	SN41072 20866	on blackthorn at bottom of start of boundary up from sycamore and no 45	0
		on bramble next to blackthorn hedge up	-
47	SN41074 20873	from no. 46	0

Parc y Delyn 2021	Tubes placed 18th May		
tube no	grid ref	description	29-Nov-21
1	SN41119 20902	In hawthorn next to entrance path	0
		In dead looking blackthorn with blackthorn scrub underneath,	
2	SN41108 20889	bracken in front	0
3	SN41097 20897	In oak away from boundary surrounded by bramble and bracken	0
		on oak side parallel to houses near boundary at bottom of field over bramble and bracken patch with a	
4	SN41099 20872	bank	0
5	SN41091 20888	on lower oak next to no.3 away from boundary	0
6	SN41110 20918	in oak in field opposite entrance and no.1	0
7	SN41083 20905	on oak in field further towards scrub near road boundary	not found
8	SN41069 20916	on bramble on edge of field near bungalow boundary	0
9	SN41075 20926	going up penlan road boundary on oak at edge of field and brambles	0
10	SN41067 20933	in bramble at edge of field next to and behind no.9	not found
11	SN41080 20949	in bramble going up boundary of the field edge	not found
12	SN41083 20956	in bramble going up boundary of the field edge	not found

33

34

SN41187 20941

SN41181 20937

0

0

I&G Ecologica	l Consulting	Dormouse Survey Land off Parc y Delyn, Carmarthen	December 2021
13	SN41083 20963	in bramble behind hazel below where oak comes out into field on edge of brambles on field edge	0
13	SN41083 20963 SN41085 20972	in oak on edge of field bramble patches either side another oak behind	0
15	SN41071 20989	in oak behind brambles next to road boundary	0
16	SN41088 20989	in brambles in front of oak that no.15 is in on edge of field	0
17	SN41096 20998	edge of bramble on field edge	not found
18	SN41099 21009	in hazel at edge of bramble at edge of field area	0
19	SN41103 21020	in bramble on edge of field area	0
20	SN41102 21028	in bramble in top corner of edge of field	not found
20	SN41102 21028 SN41110 21035	in bramble in top corner	0
21	31141110 21033	in bramble in top corner	U
22	SN41122 21032	brambles across top	0
23	SN41134 21022	in bramble across top	not found
24	SN41149 21021	in bramble across top near oak	0
25	SN41163 21028	in oak on top corner	0
26	SN41167 21012	in bramble going down edge of field (east) in front of hazel to left of marker tape in oak on eastern boundary of field	not found
27	SN41179 20995	area	0
28	SN41184 20988	in oak behind no.27s oak towards eastern boundary	0
29	SN41161 20979	in oak with a fence running under it (v low and broken) on edge of field area	0 wood mouse nest
30	SN41161 20971	in bramble on edge of field area east side	not found
31	SN41168 20965	on oak behind bramble on tongue of grassy area	0
32	SN41178 20955	in oak behind no. 31's oak. Approach from back side or below	0
22	CN144407 20044	on oak in glade of oaks line of 4 or 5 -	•

bottom one behind no.32

on oak in glade with no.33

35	SN41178 20939	on oak in glade with no.33/34		0
36	SN41163 20946	in bramble back on edge of field	not found	
		copse of oak on edge of field - back		
37	SN41145 20944	one		0
38	SN41135 20944	in copse of oaks next to no.37		0
39	SN41137 20944	in copse of oaks next to no.38		0
40	SN41130 20939	in copse on edge of field		0
		in brambles at back of copse going		
41	SN41137 20933	down boundary		0
		in brambles behind oak on edge of		
42	SN41130 20926	field		0
		in oak on edge of field directly		
43	SN41121 20914	opposite entrance path	not found	
		in bramble to the I h side of entrance		
44	SN41129 20909	looking at it from the field	not found	
		in sycamore opposite no.4 on other		
45	SN41081 20862	boundary		0
		on blackthorn at bottom of start of		
		boundary up from sycamore and no		
46	SN41072 20866	45		0
		on bramble next to blackthorn hedge		
47	SN41074 20873	up from no. 46		0

### **Appendix 2:** Photographs

View to western boundary in May 2021



View of western boundary scrub in May 2021



Dense scrub with scattered trees on eastern boundary May 2021



Checking tube in dense scrub June 2021



Scrub and bracken at entrance to site June 2021



Western boundary July 2021





