

Ceunant Llennyrch

Site: Ceunant Llennyrch National Nature Reserve

Date of survey: 14/06/2021

Transect routes: circular loop on main footpath past Rhaedr Ddu and Coed Nyth-y-Frân



Wood Warbler (*Phylloscopus sibilatrix*) in Ceunant Llennyrch.

1. Survey details

The survey of Ceunant Llennyrch woodland and river gorge followed the same route carried out in 2020 (see figure 1 below), beginning at the gate along the road where the main footpath begins at grid reference SH665392. The first transect (yellow line) covered the main way-marked circular route from here, through the woodland to Rhaeadr Ddu, and back to the start point. The second transect route (orange line) began in the river gorge and followed a way-marked circular trail through Coed Nyth-y-Frân woodland area to the west of the Afon Prysor. Both transects were carried out on 14 June 2021.

During the survey, the observer recorded any birdlife seen during the transect (especially signs of breeding activity), mammal activity, litter abundance along footpaths and at popular gathering spots and several fixed-point images along the pathways (see figure 2 for details of specific survey locations).

Weather conditions: there was low cloud to begin (100%) which cleared to 70% cloud cover by 1000, with a calm north wind (4mph) and warm temperatures (18°C).

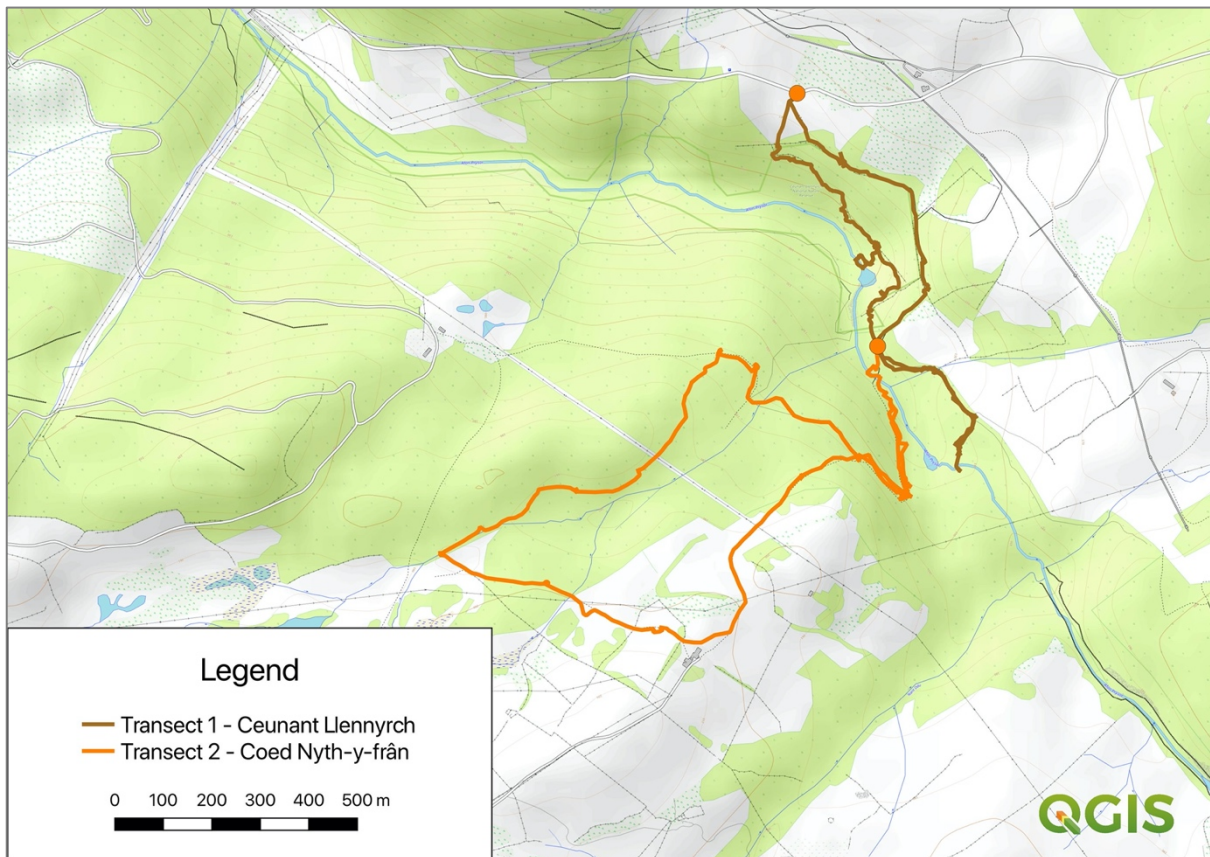


Figure 1. A map of the Ceunant Llennyrch survey area showing the two transect routes carried out on 14 June 2021: the **brown** line shows the circular route along the main footpath which passes the main waterfall Rhaeadr Ddu; the **orange** line shows the circular route taken through the Coed Nyth-y-Frân woodland area.

2. Results

A summary of the results for each of the different surveys are given below. Figure 2 below provides an overview of the locations of more noteworthy sightings, the key survey points and the locations of fixed-point images. These numbered points are referred to in the results text using parentheses followed by the numbered code, for example '(P3)'.

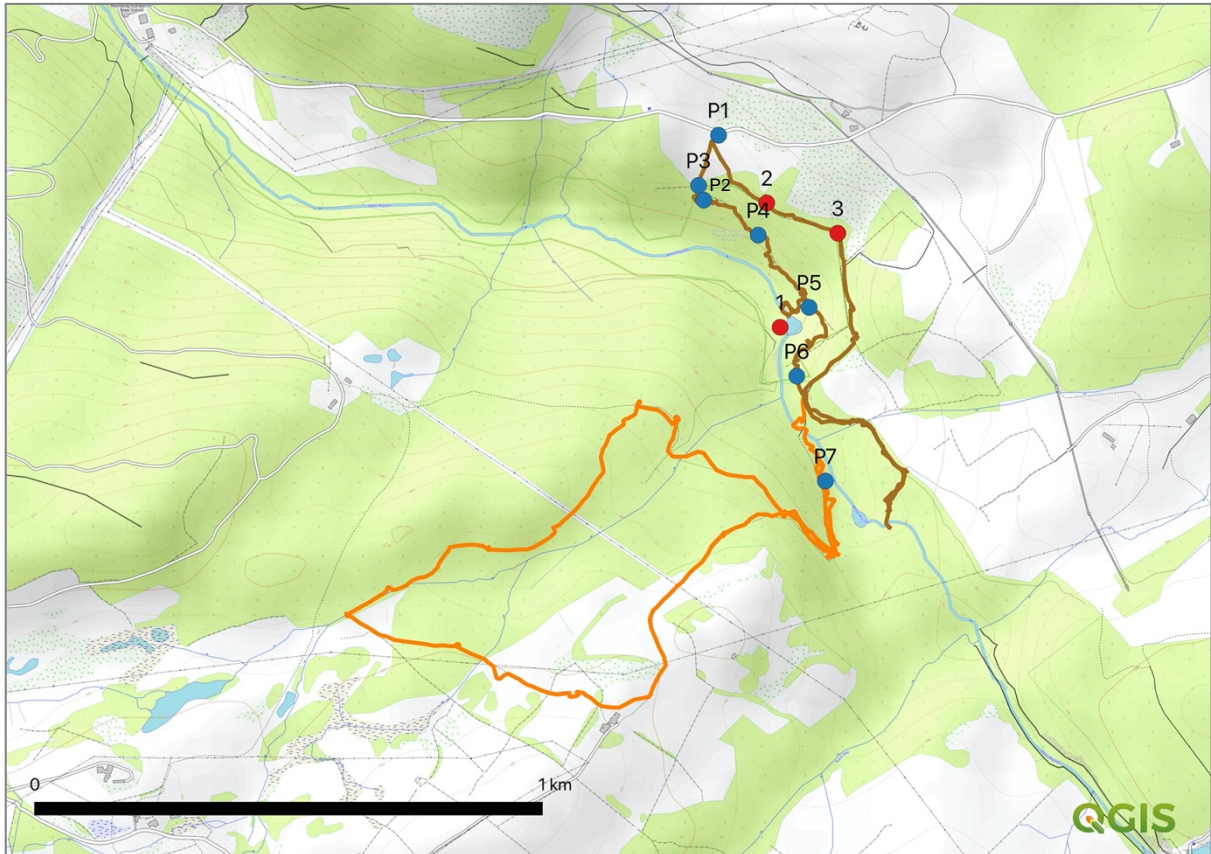
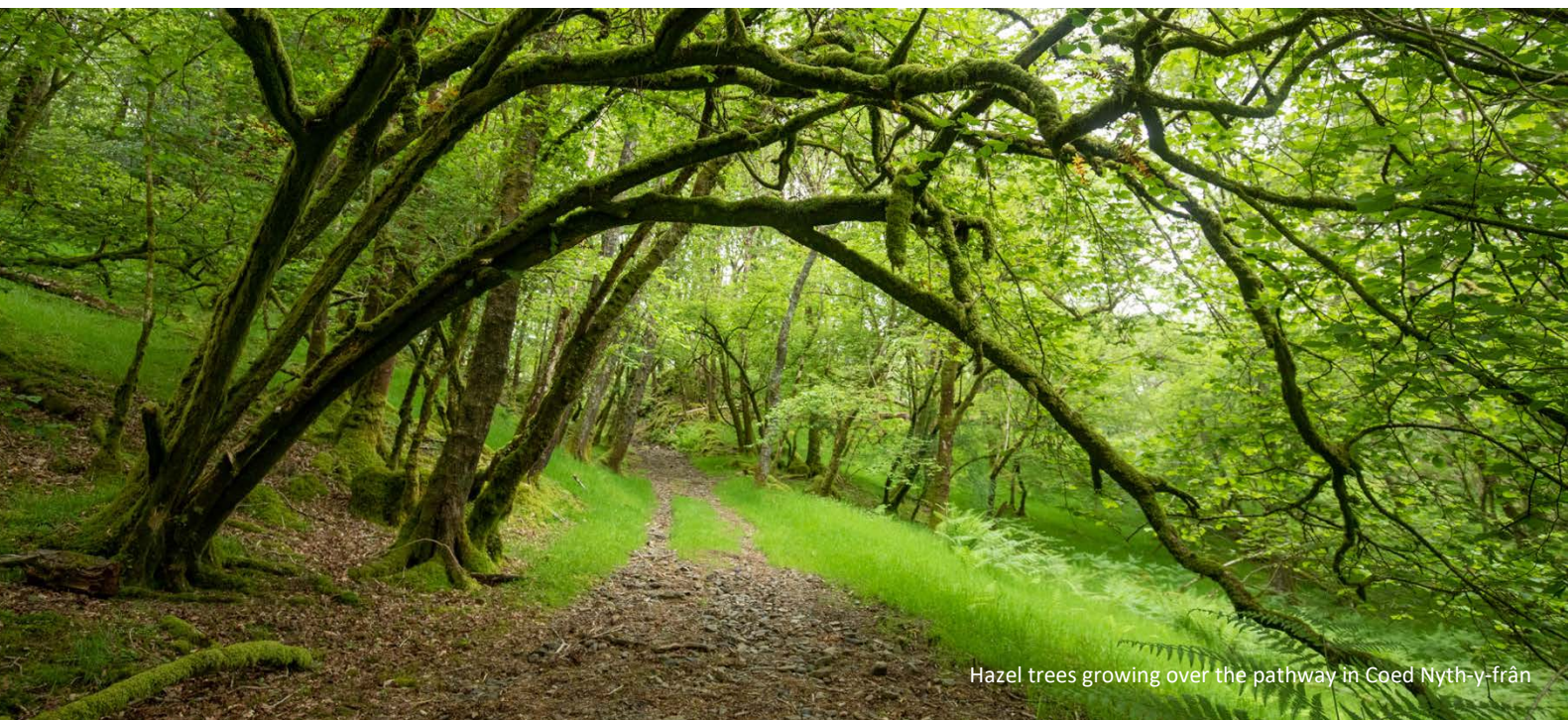


Figure 2. A map of the Ceunant Llennyrch survey area showing the two transect routes carried out on 14 June 2021. **Red** points are target notes referred to in the results summary below and **blue** points are fixed-point photography sites mainly targeted along pathways (see section 2.5).



Hazel trees growing over the pathway in Coed Nyth-y-frân

2.1 Birdlife

A total of 30 different bird species and 327 individuals were recorded across the two transect routes (see table 1 below); 22 different species and 127 individuals were recorded on the transect around Coed Llennyrch and Rhaeadr Ddu, with 25 species and 200 individuals recorded on the circuitous survey route around Coed Nyth-y-frân. The most numerous species were Wrens (53 in total), Blue Tits (44), Willow Warblers (35) and Blackcaps (23). Some of the more noteworthy sightings from the survey included four different family parties of Hawfinches, totalling 21 individuals around Coed Nyth-y-frân; 10 Pied Flycatchers (including fledged young), 17 Wood Warblers, a Spotted Flycatcher, five Common Redstarts and a Tree Pipit.

There were four species recorded during the 2021 surveys that were absent in 2020, namely that of Canada Goose, Sparrowhawk, Hawfinch and Buzzard. Conversely, five species recorded in 2020 that were not seen on the visit in 2021 included Herring Gull, Chiffchaff, Raven, Bullfinch, Dipper and Common Crossbill. A comparison of the overall numbers is given below table 1 in figures 3 and 4 below.

There were no direct effects observed during these surveys to suggest significant impacts of greater visitor numbers on the birdlife of the region. This is partly due to the nature of this site's woodland habitat and well-marked pathways, making it difficult for visitors to stray off paths and disturb wildlife in the woodland itself. However, several groups of gorge walkers were present during the survey, who utilise the Afon Prysor and Ceunant Llennyrch gorge for outdoor pursuits activities. The regular presence of such groups along the river would create disturbance to species like Grey Wagtails and Dippers, which tend to nest very close to rivers in the rocky gorge sides. No Dippers were recorded in 2021, with just one seen in 2020.

Table 1. Breeding bird survey results for Ceunant Llennyrch.

Site Name		Ceunant Llennyrch			
Survey type		Breeding birds			
Surveyors		Ben Porter			
Date of survey		14/06/2021			
Species	Scientific name	Transect or site			Evidence of breeding during visits
		Ceunant Llennyrch and Rhaeadr Ddu	Coed Nyth-y-Fran	Total number	
Wren	<i>Troglodytes troglodytes</i>	27	26	53	Singing males, alarm calling adults
Blue Tit	<i>Cyanistes caeruleus</i>	17	27	44	Alarm calling adults and fledged young
Willow Warbler	<i>Phylloscopus trochilus</i>	11	24	35	Singing males and alarm calling adults
Blackcap	<i>Sylvia atricapilla</i>	11	12	23	Singing males
Hawfinch	<i>Coccothraustes coccothraustes</i>		21	21	Fledged young (11 in total)
Chaffinch	<i>Fringila coelebs</i>	7	11	18	

Wood Warbler	<i>Phylloscopus sibilatrix</i>	11	6	17	Singing males, alarm calling adults and adults carrying food
Song Thrush	<i>Tudus philomelos</i>	2	2	4	Singing males
Pied Flycatcher	<i>Ficedula hypoleuca</i>	4	6	10	Fledged young
Blackbird	<i>Turdus merula</i>	5	9	14	Singing males
Robin	<i>Erithacus rubecula</i>	5	9	14	Singing males and fledged young
Nuthatch	<i>Sitta europea</i>	3	8	11	
Siskin	<i>Carduelis spinus</i>	1	4	5	Singing male
Goldcrest	<i>Regulus regulus</i>		4	4	
Treecreeper	<i>Certhia familiaris</i>	2	3	5	Singing males
Grey Wagtail	<i>Motacilla cinereal</i>	2		2	Singing males
Spotted Flycatcher	<i>Muscicapa striata</i>		1	1	
Mistle Thrush	<i>Turdus viscivorus</i>	2	1	3	
Great Spotted Woodpecker	<i>Dendrocopos major</i>	4	5	9	Alarm calling adults, fledged young and juveniles in a nest
Long-tailed Tit	<i>Aegithalus caudatus</i>	2		2	Alarm calling adults
Pied Wagtail	<i>Motacilla alba yaerrellii</i>		1	1	
Common Redstart	<i>Phoenicurus phoenicurus</i>		5	5	Singing male and adults with food
Coal Tit	<i>Pariparus ater</i>	3		3	Singing males
Jay	<i>Garulus glandarulus</i>	1	3	4	
Great Tit	<i>Parus major</i>	4	8	12	Alarm calling adults
Canada Goose	<i>Branta canadensis</i>	2		2	
Sparrowhawk	<i>Accipiter nisus</i>	1		1	
Swallow	<i>Hirundo rustica</i>		2	2	
Buzzard	<i>Buteo buteo</i>		1	1	
Tree Pipit	<i>Anthus trivialis</i>		1	1	
Total number of species		22	25	30	
Total number		127	200	327	

Comparing the overall figures for 2020 and 2021, the survey of this area highlighted only slight differences to the abundance and diversity of birdlife (see figures 3 and 4 below). The total of 327 individual birds recorded in 2021 is 10% less than the total of 360 for 2020. However, this difference in abundance was different for the two transect routes: 72 fewer birds were seen around the Ceunant Llennyrch transect compared to 2020, but 39 more birds were seen around the Coed Nyth-y-frân area.

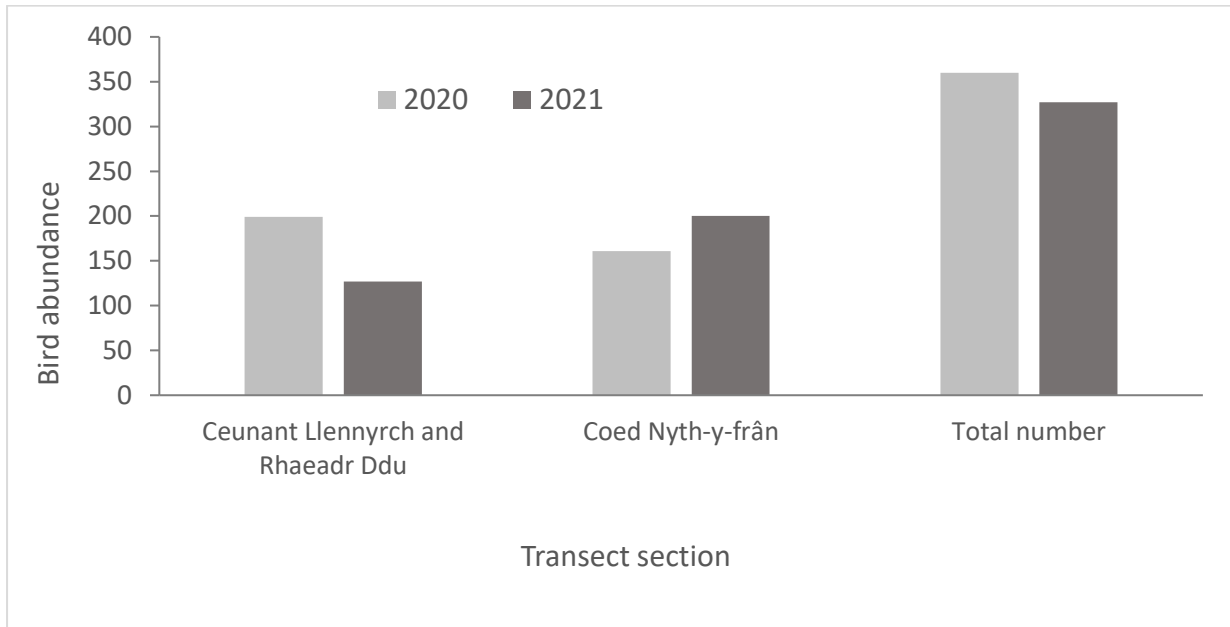


Figure 3. Bird abundance (i.e. number of individual birds recorded) along the main transect routes in 2020 (pale grey) and 2021 (darker grey).

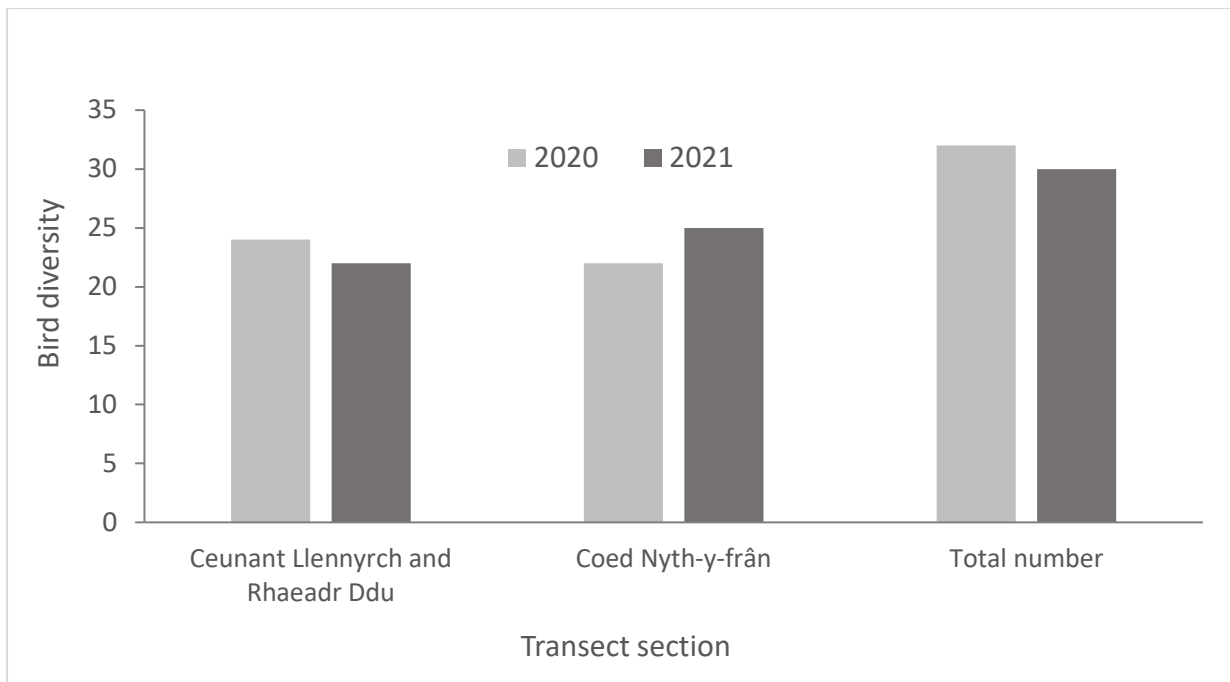


Figure 4. Bird diversity (i.e. total number of species) along the main transect routes in 2020 (pale grey) and 2021 (darker grey).



A Wood Warbler (*Phylloscopus sibilatrix*) nesting in Ceunant Llennyrch and taking food to its nest.



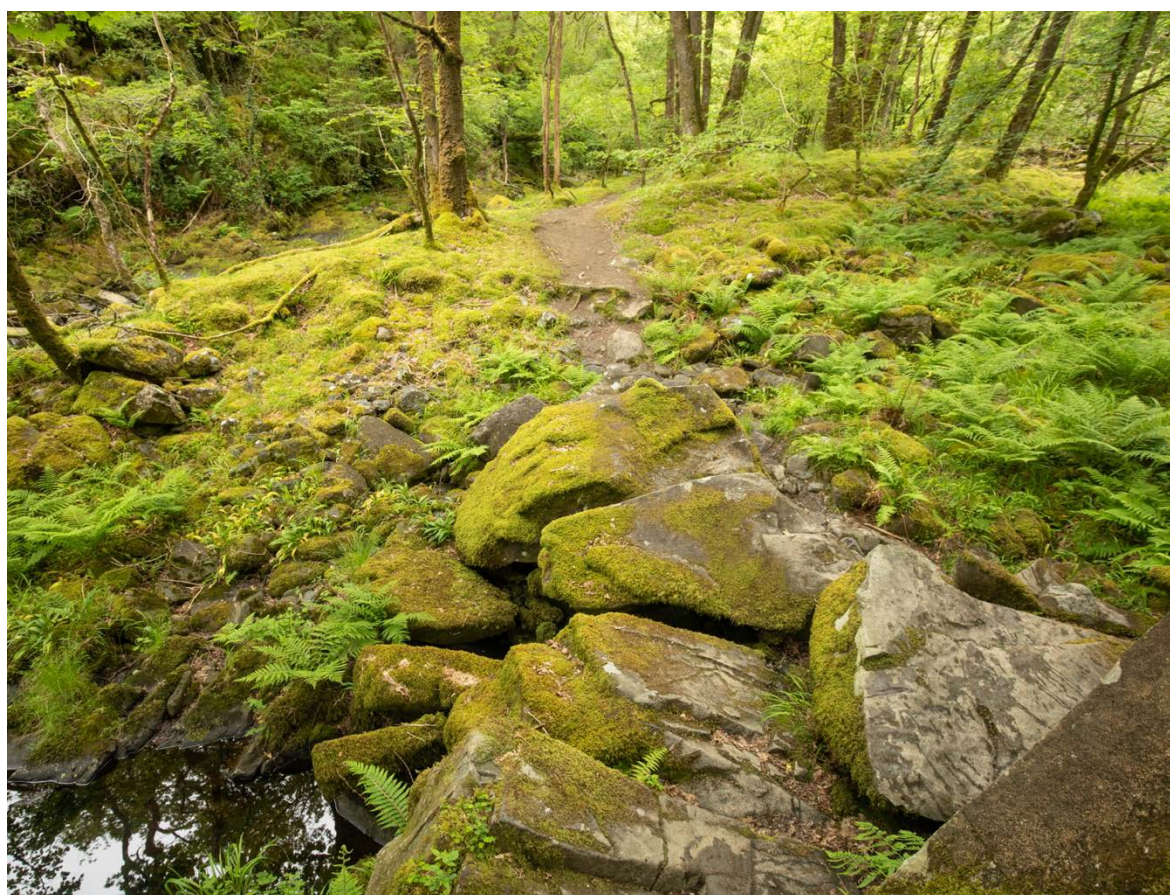
One of 21 different Hawfinches seen during the survey around Ceunant Llennyrch and Coed Nyth-y-frân. This bird is an adult, but many of those observed were families with fledged young.

2.2 Vegetation

Pathways were in general less vegetated and clearly in more use than was noted during the exceptional period in which the 2021 surveys took place – the fixed-point pathway images in section 2.5 below provide a visual comparison of this aspect of the vegetation survey work.

A particular concern in this area is the effect of human footfall and activity on the delicate (and very important) fern and moss communities that grow on the boulders, gorge sides and riverbanks along the Afon Prysor through the Ceunant Llennyrch area. It was noted that some areas of the pathways close to the river were being used quite heavily and widening into the moss and forest floor communities either side in the woodland (for example, at Point 7 in the map in figure 2 – see the image below).

The transect routes in this survey did not encompass the entire gorge itself, where gorge walking and outdoor pursuit activities frequently take place – these activities might be in danger of having an effect on the vegetation communities here, and so may be worthy of future monitoring work in the gorge.



Some effects of human footfall on the moss and fern communities along a section of the footpath at point 7 on the map in figure 2.

During the 2020 surveys, an area of the bank beside the path near the beginning of the pathways into Coed Llennyrch was subject to a large amount of erosion from motor bike use (point 2 on the map in figure 2). However, this area of ground seemed to be less disturbed in 2021 and there was not as much evidence of this activity having been taking place. See the images below for comparisons of this site in 2020 and 2021:

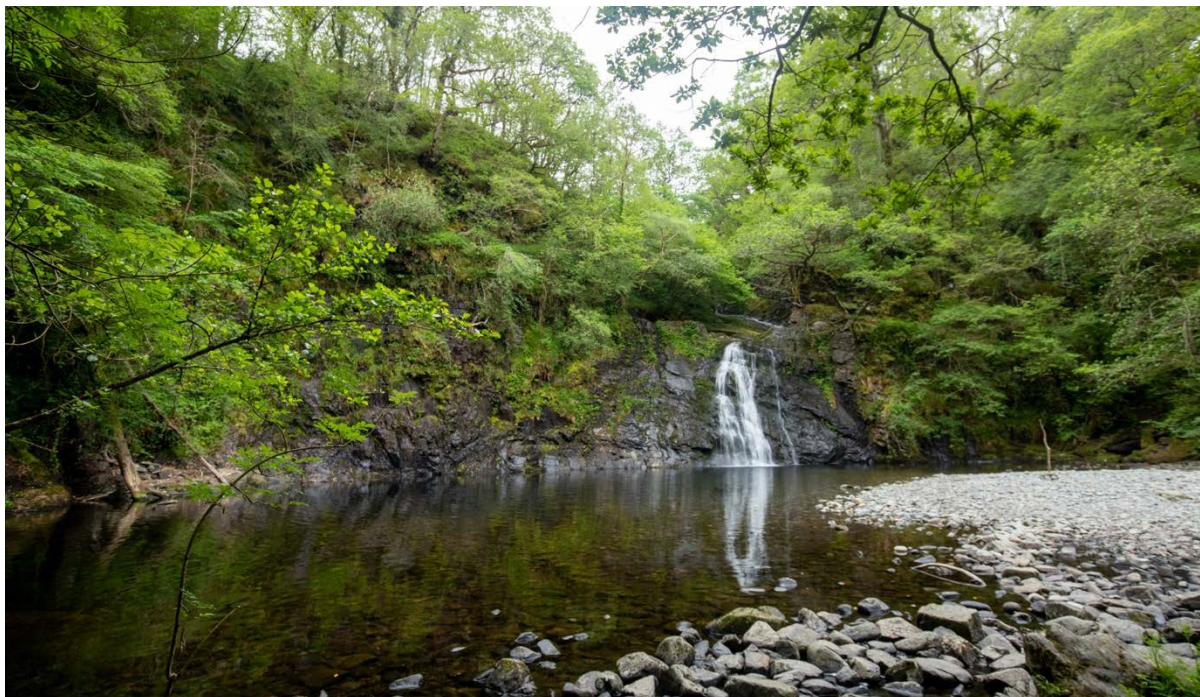


Above: damage to the mossy forest floor beneath an area of woodland at point 1 on the map in figure 2, as observed in 2020. Below: the same site in 2021, showing signs of recovery from this damaging activity.



2.3 Litter

Just one litter item was found during the 2021 survey: a dog poo along the main circuitous pathway. This is a (pleasantly!) surprising amount considering even during the quieter period of 2020 there seven items found in the area – mainly on the pebbly beach near Rhaeadr Ddu.



The waterfall of Rhaeadr Ddu is a popular visitor hotspot, although thankfully there was no litter found around this site during the 2021 visit to the area.

2.4 Other sightings

A variety of insect species were noted during the survey in Ceunant Llennyrch, including a Gold Swift moth (*Phymatopus hecta*), a Tree Bumblebee (*Bombus hypnorum*), nine Common Carder bumblebees (*Bombus pascuorum*) and four Lacuna Moths (*Celypha lacunana*).



Gold Swift moth (*Phymatopus hecta*)

2.5 Fixed-point pathway images to record vegetation condition

For this year's report, images from 2020 (left hand column) are shown alongside those from 2021 (right hand column) in the same locations to allow for comparison.



Image locations: **top row** entering the site (**P1** on the map in figure 2), **middle row** looking back towards entrance at gate into woods (**P2**) and **bottom row** along way-marked woodland footpath (**P4**).

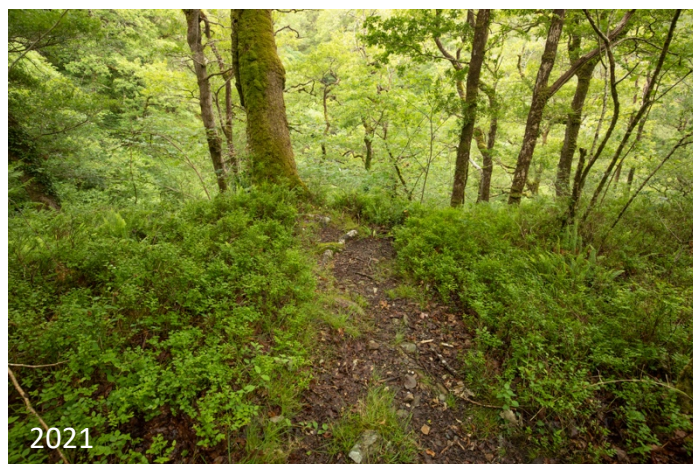


Image locations: along the way-marked woodland footpath (top row = P5 and bottom row = P6)



Wood Warbler (*Phylloscopus sibilatrix*) in Ceunant Llennyrch.