

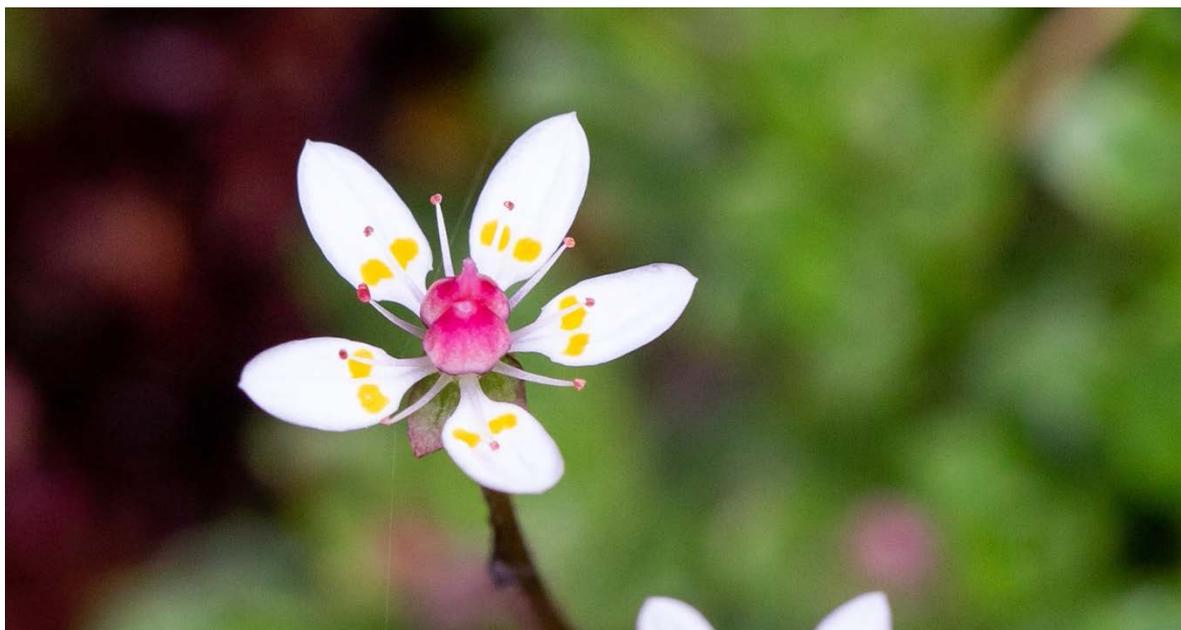
# The Ogwen Valley



**Site:** Cwm Idwal National Nature Reserve, Tryfan and y Glyderau

**Dates of surveys:** 12/06/2021 and 22/06/2021

**Transect routes:** main footpaths around Cwm Idwal, Y Garn, Tryfan and y Glyderau



Starry Saxifrage (*Saxifraga stellaris*) near Twll Du above Cwm Idwal.

# 1. Survey details

Following the transect routes set out in 2020, the surveys of the Ogwen Valley region were divided into two main sections and visits: one to cover Cwm Idwal, Y Garn and the area surrounding these sites (on 12 June 2021) and another to cover Tryfan, y Glyderau and Llyn Bochlywd (on 22 June 2021). These routes are detailed on the map below (figure 1).

During these surveys, observers recorded any birdlife seen during the transect (especially signs of breeding activity), mammal activity, litter abundance along footpaths, vegetation diversity on Y Garn summit and several fixed-point images along the pathways (see figure 2 for details of specific survey locations).

Weather conditions: on 12 June there was 90% cloud cover to begin the survey, clearing to 30% by the end of the survey; winds were light (5mph W) and temperatures mild (14°C – 16°C). On 22 June the conditions were very calm (5-10mph W), with cooler temperatures (8°C – 16°C) and 50% cloud cover.

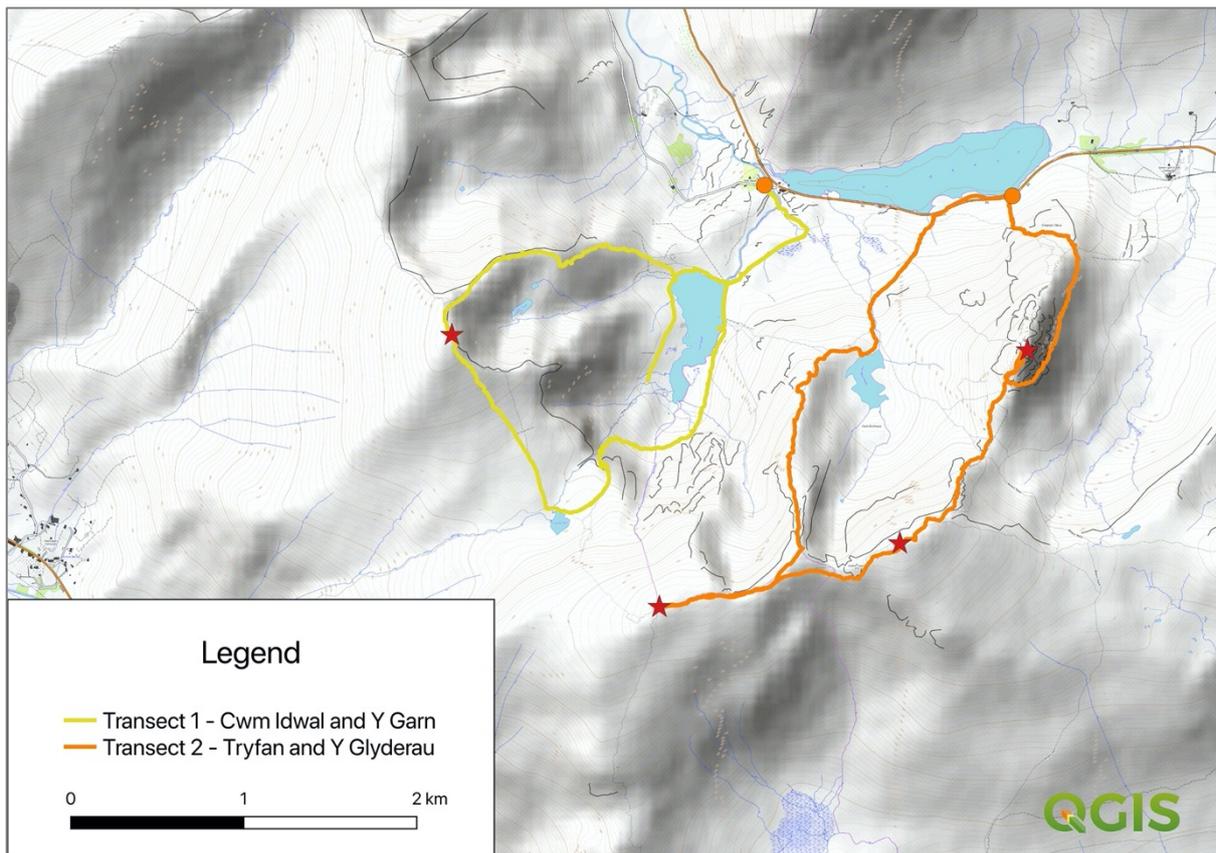
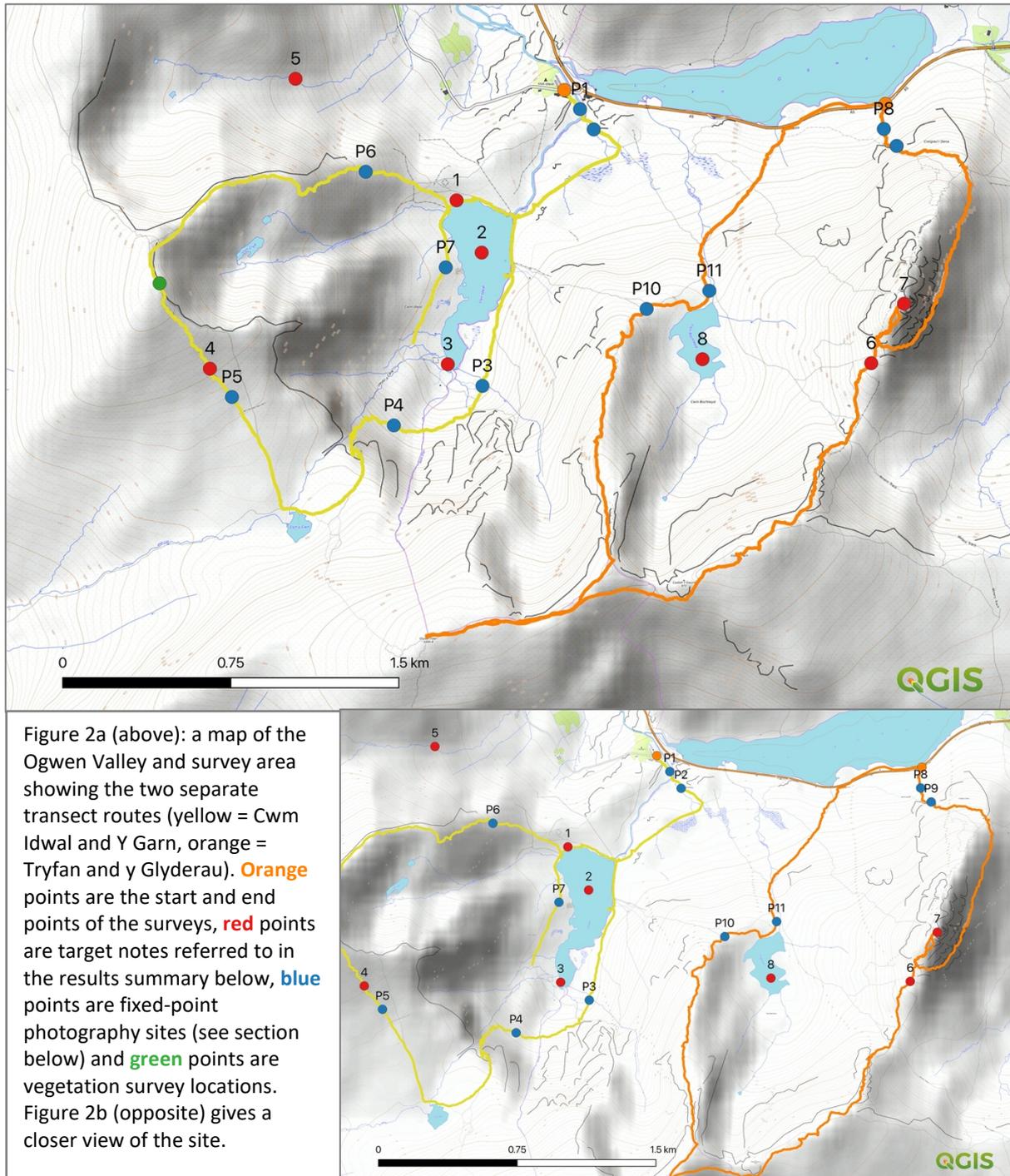


Figure 1. Transect routes for the Ogwen Valley surveys outlined in orange and yellow tracks; orange dots denote start and end of transect routes; and red stars denote main summits.

## 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)'.



## 2.1 Birdlife

A total of 18 different bird species and 297 individual birds were recorded across the different transect sections over the two survey visits (see table 1 below). The most abundant species recorded were Meadow Pipits (a total of 169 individuals), Wrens (39 individuals), Carrion Crows (14 individuals) and Canada Geese (12 individuals). More noteworthy sightings included five Ring Ouzels spread across the survey area (including two singing males and an alarm-calling pair – points 6 and 7 on the maps in figure 2), two pairs of Common Sandpipers (on Llyn Idwal and Llyn Bochlwyd) and a nesting pair of Great Crested Grebes on Llyn Idwal (point 3 on the maps in figure 2).

A total of ten bird species seen in the 2020 surveys were absent from those in 2021, which comprised Dipper, Twite, Mallard, Cuckoo, Robin, Willow Warbler, Grey Heron, Red Kite, Lesser Black-backed Gull, Blackcap and House Martin. Many of these species were seen either in passing or in very small numbers in 2020, but Dipper, Cuckoo, Willow Warbler and Blackcap were recorded with breeding evidence, and so their absence in 2021 is noteworthy. Just one species was seen in 2021 that was not present in 2020: a single Lesser Redpoll flying over Cwm Idwal.

Some observations related to a comparison of key sightings between 2020 and 2021 are outlined below.

- **Birdlife around Llyn Idwal and Llyn Bochlwyd (2 and 8):** just one pair of Common Sandpipers were present on the western flanks of Llyn Idwal in 2021, compared to three pairs in 2020. However, a pair was also seen on Llyn Bochlwyd (point 8 on the map in figure 2), where none were recorded in 2020. The pair of Great Crested Grebes found to be nesting on the southern side of Llyn Idwal in 2020 were again present in the area of aquatic vegetation in 2021, most likely incubating eggs on their nest during the time of the surveys in 2021. This observation is welcoming to see, indicating that the increased visitor numbers do not seem to have adversely disturbed this breeding pair. A total of 12 Canada Geese (10 adults and two young) on Llyn Idwal (point 2) on the map in figure 2) were recorded, a non-native species whose effects around upland freshwater lakes such as this can be non-desirable (such as increased nutrients from guano, grazing and trampling on the lakeside vegetation).
- **Ring Ouzels.** A total of five Ring Ouzels were recorded during the 2021 surveys, which is the same figure as seen in 2020. These included two male birds singing in Cwm Cywion (5); two birds alarm calling on the lower flanks of Tryfan (6) and another bird 50 metres south of this site. No birds were seen around Llyn Idwal and its surrounding cliffs, where several birds were recorded in 2020. Locations for the 2020 surveys included an alarm-calling bird on Y Gribbin facet above Llyn Idwal, another feeding opposite Llyn Ogwen on the mountainside very close to the footpath and a pair with a fledgling chick less than 5 metres from the path at grid reference SH637599 on the descent from Y Garn.
- **Birds nesting along pathways:** there were no noticeable nesting songbirds recorded right beside the main pathways in 2021, contrasting to that observed during the exceptional conditions of 2020. However, the number of breeding birds in general was much lower in 2021, and the cold weather conditions of early spring seem to have shifted breeding activity one or two weeks later, and so this combined could also account for the observations made.

**Table 1.** Breeding bird survey results for Ogwen Valley transects.

Name		Ogwen Valley: Cwm Idwal, y Garn, Tryfan and y Glyderau			
Survey type		Breeding birds			
Surveyors		Ben Porter			
Dates of surveys		12/06/2021 and 22/06/2021			
Species	Scientific name	Transect or site			Evidence of breeding during visits
		Cwm Idwal and Y Garn	Tryfan and Glyderau	Total number	
Meadow Pipit	<i>Anthus pratensis</i>	80	89	<b>169</b>	Singing males, fledged young and alarm calling adults
Wren	<i>Troglodytes troglodytes</i>	25	14	<b>39</b>	Singing males
Canada Goose	<i>Branta canadensis</i>	12		<b>12</b>	Two juveniles
Carrion Crow	<i>Corvus corone</i>	12	2	<b>14</b>	
Grey Wagtail	<i>Motacilla cinerea</i>	9	1	<b>10</b>	Singing males
Northern Wheatear	<i>Oenanthe Oenanthe</i>	7	3	<b>10</b>	Singing males
Stonechat	<i>Saxicola torquata</i>	2	2	<b>4</b>	Singing males
Skylark	<i>Alauda arvensis</i>	2		<b>2</b>	Singing males
Raven	<i>Corus corax</i>		8	<b>8</b>	Fledged young (3)
Kestrel	<i>Falco tinnunculus</i>	3		<b>3</b>	
Common Sandpiper	<i>Actitis hypoleucos</i>	2	2	<b>4</b>	Two birds calling on the western shore of Cwm Idwal and two on Llyn Bochlywyd
Great Crested Grebe	<i>Podiceps cristatus</i>	2	3	<b>5</b>	A pair nesting on southern side of Cwm Idwal
Pied Wagtail	<i>Motacilla alba yarrellii</i>	2	2	<b>4</b>	
Ring Ouzel	<i>Turdus torquatus</i>	2	3	<b>5</b>	Singing males and alarm calling pair
Buzzard	<i>Buteo buteo</i>	1		<b>1</b>	
Herring Gull	<i>Larus argentatus</i>	1	6	<b>7</b>	
Duncock	<i>Prunella modularis</i>		1	<b>1</b>	
Lesser Redpoll	<i>Carduelis cabaret</i>		1	<b>1</b>	
<b>Total number of species</b>		<b>15</b>	<b>13</b>	<b>18</b>	
<b>Total number</b>		<b>162</b>	<b>137</b>	<b>299</b>	

In terms of the overall figures, the survey of this area highlighted substantial differences to the abundance and diversity of birdlife compared to 2020 (see figures 3 and 4 below). The total of 299 individual birds is almost 20% fewer than the figure of 363 individual birds recorded in 2020. Similarly, the diversity of 18 different species is ten species fewer than recorded in 2020. The reasons for this difference are discussed in greater detail in the overall summary for the 2021 surveys, but are more likely linked to markedly different weather conditions in 2021 compared to 2020; particularly the colder conditions and a delayed breeding season for many species in upland areas.

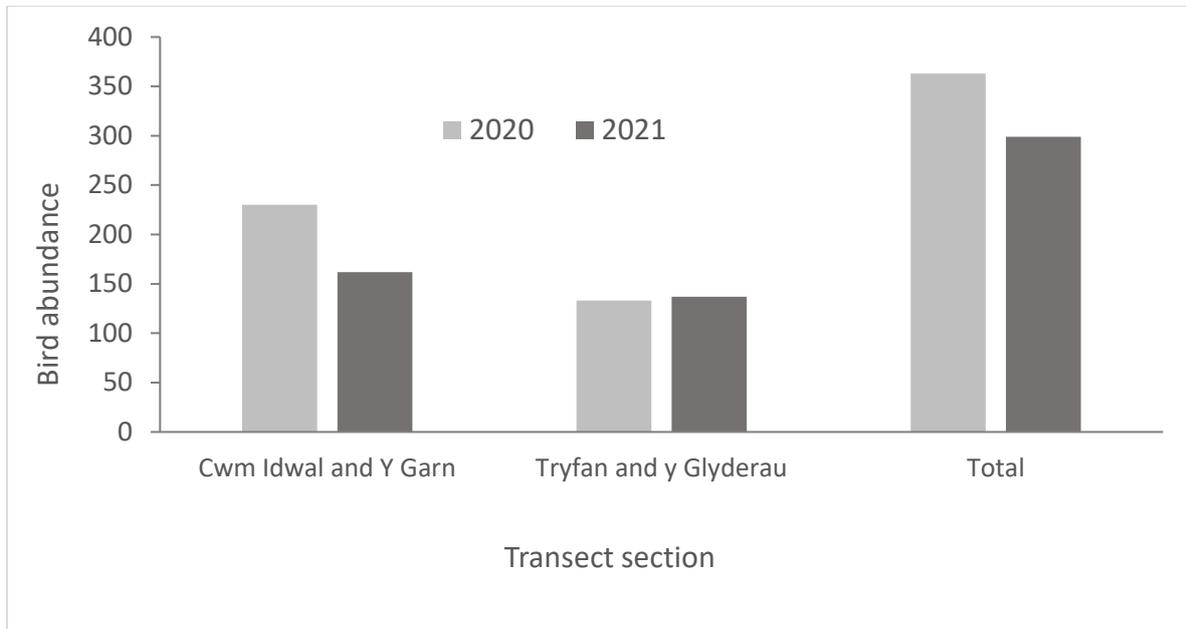


Figure 3. Bird abundance (i.e. number of individual birds recorded) along the main transect routes in 2020 (pale grey) and 2021 (darker grey).

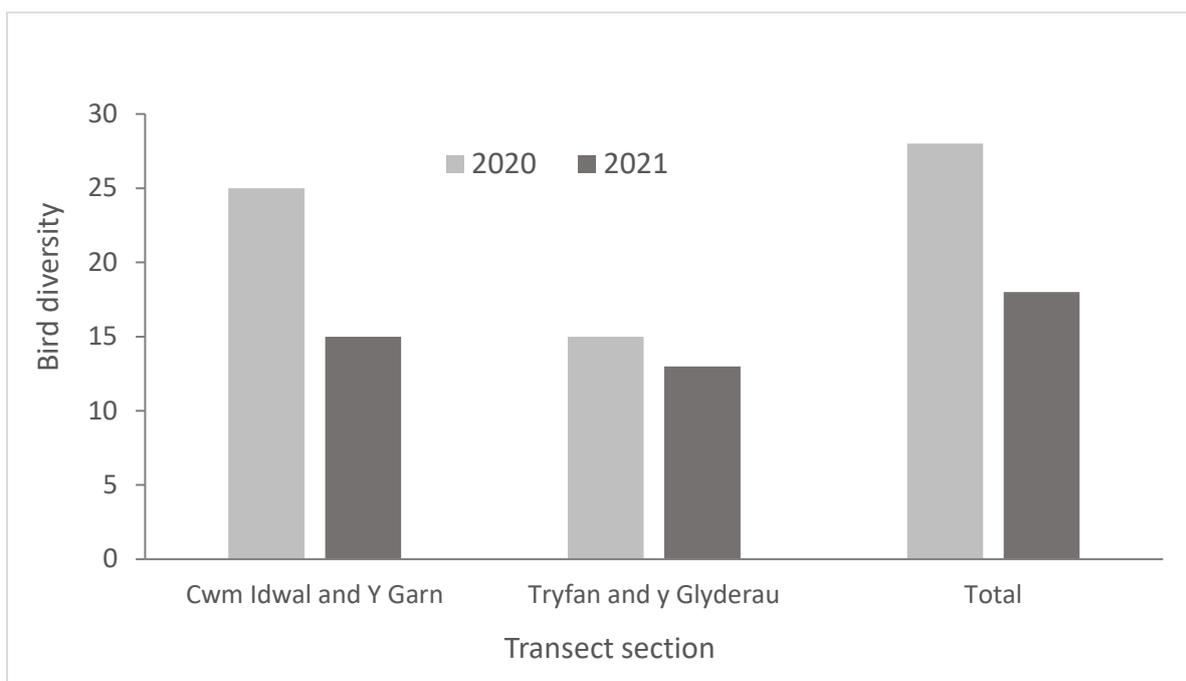


Figure 4. Bird diversity (i.e. total number of species) along the main transect routes in 2020 (pale grey) and 2021 (darker grey).



Above: a juvenile Raven (*Corvus corax*) takes flight from Y Glyderau, with Crib Goch in the distance.



Above: a Meadow Pipit (*Anthus pratensis*) near Y Garn.

## 2.2 Vegetation

The vegetation close to and along pathways was less verdant than during the 2020 surveys, as perhaps could be expected given the dramatic difference in human footfall along these paths in spring 2020 compared to spring 2021. However, this difference was also compounded by a late growing season after cold spring temperatures, resulting in less profuse growth in all areas. The fixed-point images (section 2.6 below) give a visual comparison of several sites along the pathways to illustrate any differences.

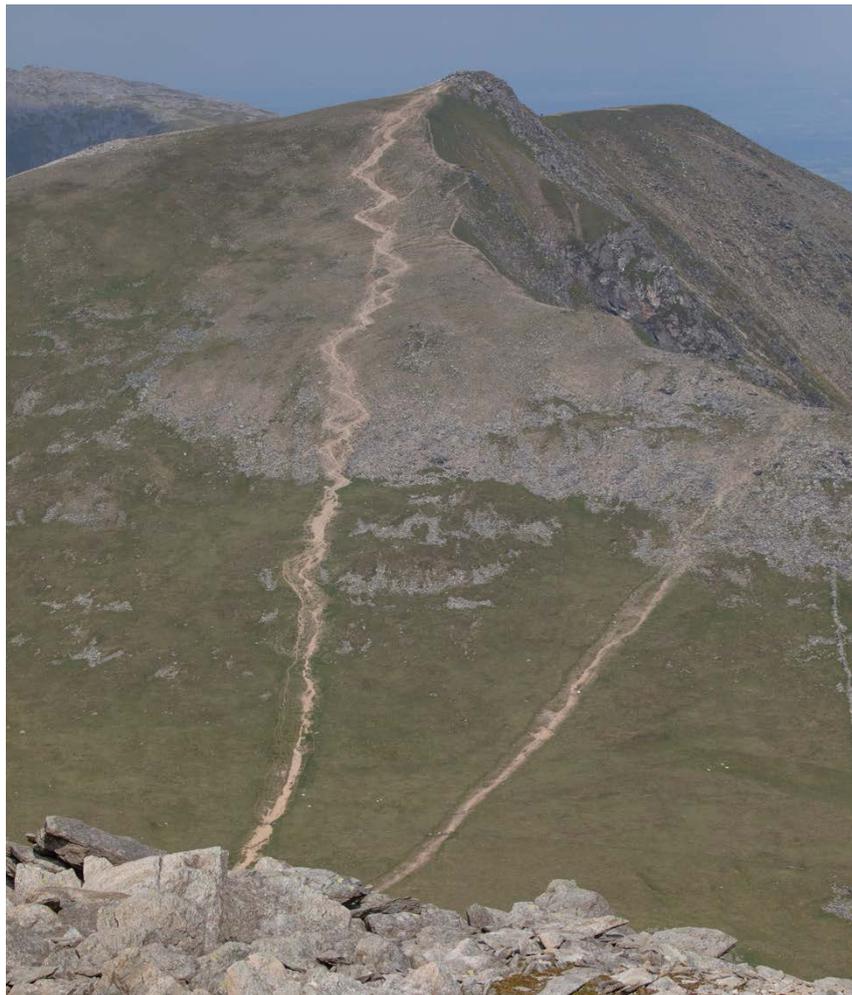
There were some sections of the paths where erosion from usage was noticeable, such as along parts of the Heather Terrace (below Tryfan) and the main path ascending Y Garn from Twll Du. A repeat survey of vegetation communities around the summit of Y Garn (see table 2) revealed eight detectable species and species groups, which is comparable to the nine species recorded at this location in 2020.

**Table 2.** Results from summit vegetation survey on Y Garn.

<b>Site Name</b>	Y Garn		
<b>Grid Reference</b>	SH630596		
<b>Survey type</b>	Summit vegetation survey (10m radius around summit)		
<b>Surveyors</b>	Ben Porter		
<b>Date of survey</b>	12/06/2021		
<b>Species</b>	<b>Scientific name</b>	<b>DAFOR score</b>	<b>Notes</b>
Dog Lichen sp.	<i>Peltigera sp.</i>	Frequent	
Woolly Fringe Moss	<i>Racomitrium lanuginosum</i>	Frequent	
Haircap moss sp.	<i>Polytrichum moss sp.</i>	Frequent	
Heath Bedstraw	<i>Gallium saxatile</i>	Occasional	
Moss sp.		Occasional	
Sheep's Fescue	<i>Festuca ovina</i>	Occasional	
Bilberry	<i>Vaccinum myrtillus</i>	Occasional	
Parsley fern	<i>Cryptogramma crispa</i>	Rare	
<b>Total number of species</b>	<b>8</b>		



Above: footpath erosion near Tryfan along the 'heather terrace' at SH 66381 59182.



Above: the footpaths ascending Y Garn and their impact on the landscape.

## 2.3 Litter

A total of 88 items of 19 different litter types were recorded across the main pathways and survey areas covered across the Ogwen Valley site (see table 3 below). The summit of Tryfan (point 7 on the map in figure 2), somewhat surprisingly, was one of the worst sites for litter, with a total of 47 items of 10 types (30 of which were discarded cigarette butts). Cwm Idwal and its shores were relatively clear of waste with 25 items of 12 types recorded across the whole pathway encircling Llyn Idwal and Y Garn.

The commonest litter items recorded were cigarette butts (45), followed by sweet wrappers (9), orange peel (5) and banana peel (4). The latter two items, banana skins and orange peel, are items which many hikers might consider acceptable to discard given that they are organic items. However, it can take up to two years for these to break down in the environment, and so frequent littering of such items can lead to a build up across popular areas and paths such as in Eryri.

The total of 88 items recorded in 2021 is much higher than the 11 items found across the same routes in 2020. Similarly, only four items were found in 2020, compared to the 19 in 2021.

**Table 3.** Results of litter surveys around Cwm Idwal and y Glyderau.

<b>Site Name</b>	Ogwen Valley: Cwm Idwal, y Garn, Tryfan and y Glyderau			
<b>Survey type</b>	Litter survey			
<b>Surveyors</b>	Ben Porter with help from Steve Porter			
<b>Date(s) of survey</b>	12/06/2021 and 22/06/2021			
<b>Litter type</b>	<b>Quantity</b>			
	<b>Cwm Idwal and Y Garn</b>	<b>Tryfan and y Glyderau</b>	<b>Tryfan summit</b>	<b>Total</b>
Cigarette butt	6	9	30	<b>45</b>
Sweet wrapper	3	2	4	<b>9</b>
Hard plastic pieces	1			<b>1</b>
Plastic bottle			1	<b>1</b>
Plastic bottle top			1	<b>1</b>
Plastic bag			1	<b>1</b>
Plastic sandwich box			1	<b>1</b>
Wet wipe	1			<b>1</b>
Dog poo bag	1			<b>1</b>
Tin can	1		2	<b>3</b>
Plastic fork	1			<b>1</b>
Tripod leg	1			<b>1</b>

Clothes		2		2
Tin foil	1			1
Bag strap	2			2
Glass bottle		1	1	2
Banana peel	3	1	1	5
Orange peel		1	5	6
Wooden lolly stick	4			4
<b>Total number of litter types</b>	<b>12</b>	<b>6</b>	<b>10</b>	<b>19</b>
<b>Total number of litter items</b>	<b>25</b>	<b>16</b>	<b>47</b>	<b>88</b>



Top and bottom right: a plastic bag full of waste left around the summit of Tryfan; bottom left: a total of 45 discarded cigarette butts were recorded across all transects. These butts contain a number of toxic chemicals which can leach into the surrounding environment and enter the food chain if ingested.

## 2.4 Other sightings and notes from the survey

**Feral mountain goats:** a total of 57 Feral goats were recorded across the survey area in 2021, mostly concentrated around the eastern flanks of Tryfan and southern end of Cwm Tryfan. This compares to 99 recorded during the same surveys in 2020.

**Dwarf Willow (*Salix herbacea*):** a small area of this hardy mountain willow species exists on the summit area of Y Garn and along the main footpath to its peak (near point 4 on the map in figure 2). These patches were still present in 2021 and did not appear to have been adversely affected by trampling.

**Insects:** a variety of insect species were recorded during the 2021 surveys, although noticeably fewer than in 2020. Sightings included one Common Heath butterfly, one Heath Bumblebee, a caterpillar of the Drinker moth, and a variety of micro moth species: *Catoptria furcatellus* (six), *Clepsis synecioanana* (one), *Neofaculta ericetella* (one), *Crambus lathoniellus* (one), *Ancylis myrtillana* (one) and *Incurvaria oehlmanniella* (one).



Above left: Feral goat. Above right: Dwarf willow (*Salix herbacea*)



Above left: *Catoptria furcatellus* (a scarce montane micro moth species) and above right: *Ancylis myrtillana*.

**Camping activity:** a total of 15 tents were recorded around the edge of Llyn Idwal on the earlier visit on 12<sup>th</sup> June 2021. These tents were accompanied by several inflatable dinghies along the lake edge. These tents were present at the beginning of the survey (approx. 0700) but had been cleared by the end of the survey in the late morning.



Camping activity around the edge of Llyn Idwal on 12<sup>th</sup> June 2021.

## 2.5 Grazing levels

Whilst not specifically monitored during the surveys, the condition of habitats along the transect routes plays a significant role in dictating the abundance and diversity of plantlife, insect life and birdlife existing in these areas. The Cwm Idwal National Nature Reserve (NNR) area itself has seen a reduction in grazing pressure from sheep since its designation as a SAC (Special Area of Conservation) in the 1990s. This is now reflected in the spread of heather, bilberry, flowering plants and grasses in the area surrounding the lake. Across the majority of the other areas covered in this survey (such as the summit plateau area of Y Glyderau, Cwm Tryfan and the land surrounding Y Garn) sheep grazing is the dominant player in dictating the habitat condition, which largely consists of semi-natural grassland. These differences in habitat are reflected in the assemblage of birdlife recorded during the survey, both in terms of diversity and abundance.



Heath Spotted Orchids (*Dactylorhiza maculata*) in the grassland in Cwm Idwal NNR (National Nature Reserve) close to the main path.



Moss Campion (*Silene acaulis*) in Twll Du ('Devil's Kitchen').

## 2.6 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.

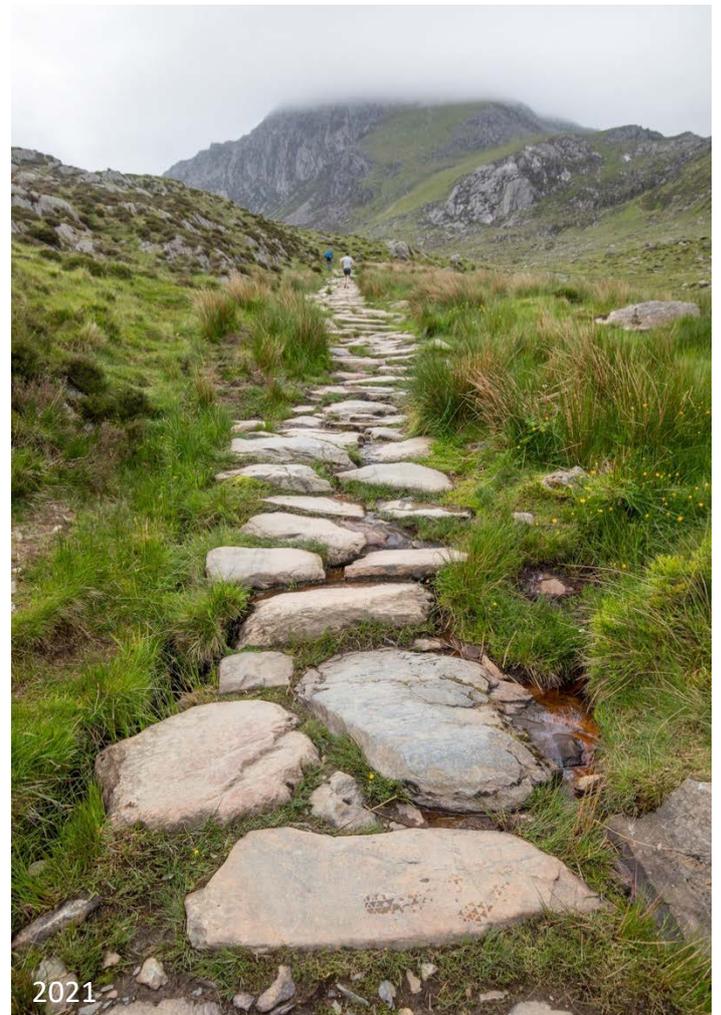


Image locations (numbers referencing to map in figure 2 at beginning of section): **top row** at beginning of path to Llyn Idwal (**P1**), **bottom row** midway to Llyn Idwal (**P2**).



Image locations: **top row** ascending towards Idwal Slabs (P3), **middle row** ascending towards boulder scree (P4), **bottom row** on ascent up Y Garn's southern face (P5).



Image locations: **top row** descending from Y Garn to Llyn Idwal (P6), **middle row** along edge of Llyn Idwal (P7) and **bottom row** at start of ascent to Y Tryfan (P8).

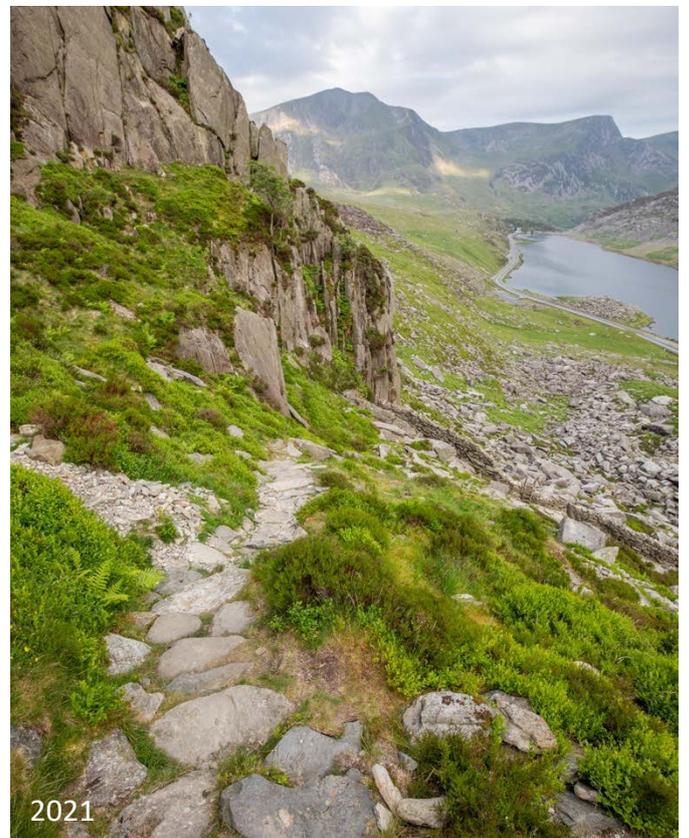
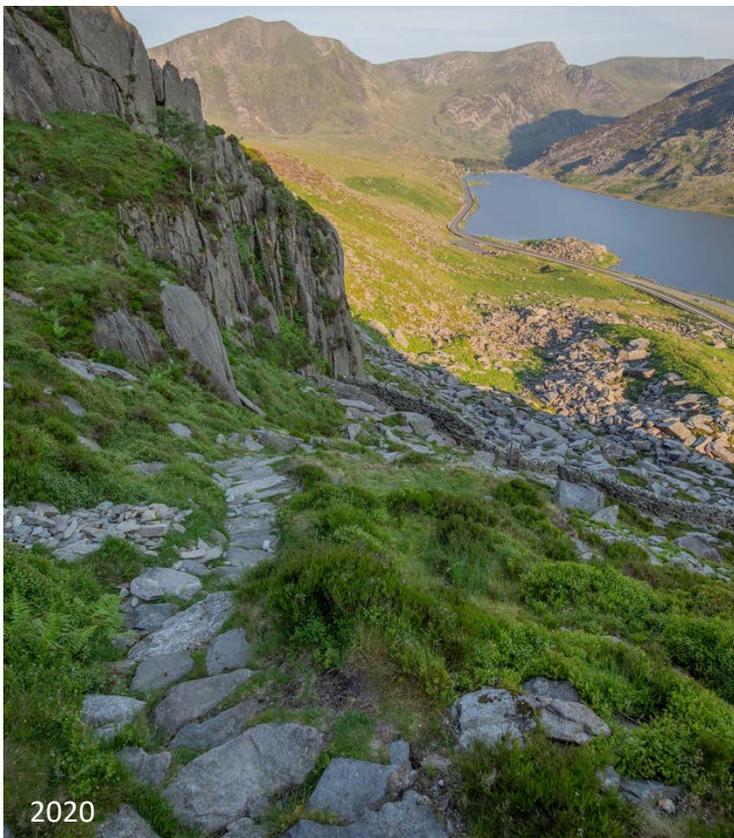


Image locations: **top row** looking over to Llyn Ogwen from the base of the north-east side of Tryfan (**P9**), **middle row** descending from Y Gribbin towards Llyn Bochlwyd (**P10**) and **bottom row** descending from Llyn Bochlwyd towards Llyn Ogwen (**P11**).

## 2.7 Images from the survey



Looking south-east to Tryfan from Llyn Bochlwyd



Starry Saxifrage (*Saxifraga stellaris*)



Bilberry Roller (*Ancylis myrtiliana*)



Dwarf Willow (*Salix herbacea*)



Looking north-east from Tryfan



Meadow Pipit (*Anthus pratensis*)