An assessment of the wildlife response to Covid-19 lockdown in north-west Wales: a comparison between 2020 and 2021

Executive summary

Introduction

In June 2020 a series of surveys were carried out across key areas in the Snowdonia National Park and north-west Wales, commissioned by Natural Resources Wales, the National Trust and the Snowdonia National Park Authority. The aim of these surveys was to evaluate how the region's wildlife was responding to the exceptional period of lockdown induced by the health crisis of the Coronavirus, and primarily involved recording breeding bird activity, vegetation condition and litter prevalence. The surveys covered four upland sites (Yr Wyddfa / Snowdon, the Ogwen Valley, the Carneddau and Cader Idris) and three lowland sites (Ceunant Llennyrch, Coed-y-Brenin and Niwbwrch / Newborough Warren). Surveys of these areas were repeated in June 2021 to enable comparisons to be made between the two years: comparing the unusually quiet visitor spring season of 2020 with an exceptionally busy visitor season experienced in 2021 after the Park re-opened fully to the general public. The key findings of these surveys are outlined below, with a more detailed summary and individual site-by-site reports available from the Snowdonia National Park Authority and Natural Resources Wales' website.

Key findings

Reduced abundance and diversity of birdlife across upland areas.

The abundance and diversity (i.e. number of species) of birdlife was much lower across the four upland sites in 2021 compared to 2020. Little difference was found across the lowland sites between surveys. A total of 65 bird species were recorded across all upland sites in 2020, compared to 50 in 2021; whilst the abundance of birdlife involved 1609 individual birds in 2020, compared to 1491 in 2021. This reduction can largely be attributed to the stark contrast in the two seasons' weather conditions; in particular, a very cold spring in 2021 delaying breeding seasons for many bird species and leading to fewer fledgling birds recorded at the time of the survey in 2021. A longer-term dataset from these areas would help to provide more reliable comparisons to which the exceptional period of 2020 'lockdown' can be contrasted.



A Ring Ouzel gathers food for its chicks on the flanks of Cader Idris. The 2021 surveys revealed reduced abundance of many breeding bird species across upland sites.

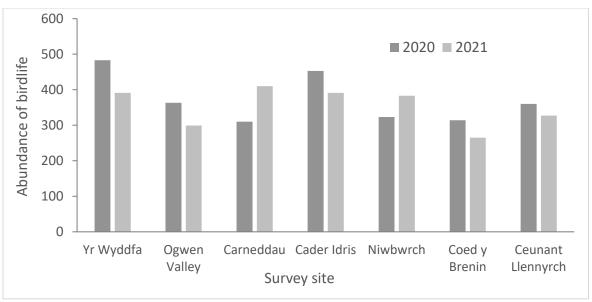


Figure 1. Abundance of birdlife (i.e. the total number of individual birds) recorded across the survey sites in 2020 and 2021. A reduction in abundance of birdlife in 2021 compared to 2020 is most noticeable for Yr Wyddfa, the Ogwen Valley and Cader Idris in the upland survey sites.

Increased littering.

One of the disheartening and clear contrasts between 2020 and 2021 was of the amount of litter and waste recorded in the most popular areas of the survey sites in 2021. In the upland areas, a total of 418 pieces of litter of 30 litter types were recorded across the four sites during the survey visits, compared to 93 items of 24 types in 2020. The sites with the highest degree of littering were Yr Wyddfa (299 pieces) and the Ogwen Valley (88 pieces), whilst the other two upland sites were relatively free of litter and waste, with just three pieces recorded on the Carneddau and 28 on Cader Idris during the survey visits. The lowland sites were seemingly less impacted by this activity, with 89 different pieces of 16 types recorded across the three sites in 2021, compared to 12 different litter items of seven types in 2020. By far the most affected lowland site was Niwbwrch / Newborough Warren, where a total of 78 items and 15 different litter types were found during the survey, overwhelmingly concentrated around the 'beach car park' area. The most common litter items found in 2021 were plastic sweet wrappers and packets (128) followed by discarded cigarette butts around summit cairns (127) and plastic bottles (53).



A plastic bag full of litter collected from the summit of Tryfan.

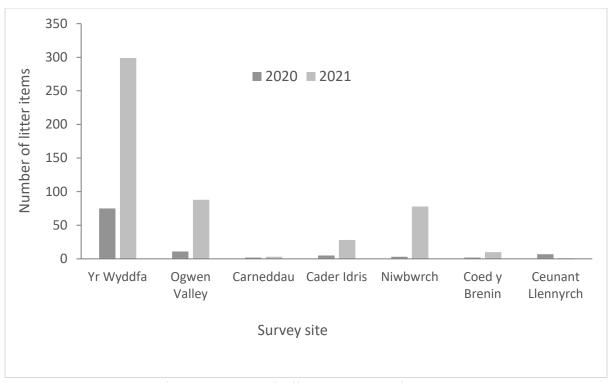


Figure 1. Litter abundance (i.e. the number of different litter items) recorded across the survey sites in 2020 and 2021.

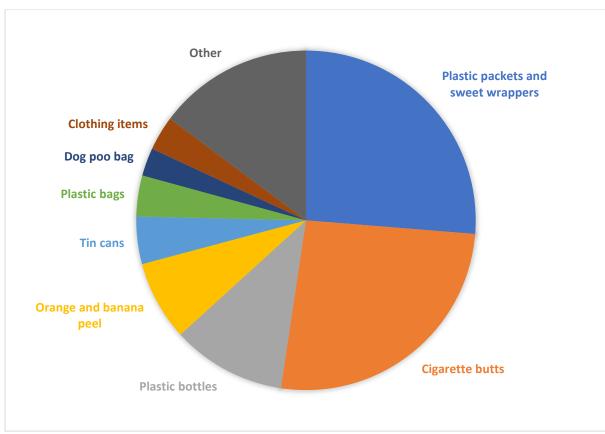


Figure 2. An overview of the most abundant litter types recorded across the survey sites during the 2021 surveys.

Breeding bird disturbance.

The surveys provided a mixed picture for the effects of visitors on the birdlife in these areas:

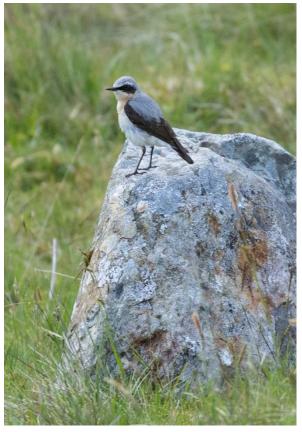
Upland lakes.

Upland lakes held fewer breeding pairs of Common sandpipers – a wader species which can be sensitive to disturbance from people and increased usage of popular lakes like Llyn Idwal and Llyn Llydaw. Fewer pairs of Common Sandpipers were noted around Llyn Llydaw (four birds in 2021 compared to eight in 2020) and Llyn Idwal (two birds in 2021 compared to six in 2020), and no birds were seen around Llyn Gafr (Cader Idris) in 2021 where a single pair was seen in 2020. On a positive note, one pair was recorded on Llyn Bochlwyd (below Tryfan) in 2021 where no birds were seen in 2020. These changes between years can again be partly attributed to different weather conditions, but disturbance may also be playing a role. In other news, a pair of Great Crested Grebes were again recorded nesting on the southern edge of Llyn Idwal, where a pair was seen breeding during the 2020 season. It is welcoming to see these birds continuing to breed here despite the higher levels of visitors in 2021 compared to 2020.

Birdlife close to main paths.

In 2020 it was noted that many bird species, including Meadow pipits, Wheatears and even Ring Ouzels, were breeding close to the usually popular pathways, especially in upland areas. This was not the case in 2021, with few species seen nesting close to the paths. On Ynys Llanddwyn, there was no sign of the Ringed Plovers which were recorded nesting on the small beach near Twr Mawr in 2020; and just a single pair of Oystercatchers were seen around the island where seven pairs were recorded breeding around its coast in 2020. The absence of Ringed Plovers could well be attributed to increased disturbance from visitors during 2021, as this species is very sensitive to regular disturbance; Oystercatchers are more resilient to usage of areas, but this could still be playing a part in the reduction seen in 2021.





Bird species like Meadow pipits (above left) and Northern Wheatears (above right) were recorded in reduced abundance across upland sites in 2021, and few were found nesting close to pathways.

Fly camping and visitor pressure on sites.

Whilst the primary focus of these surveys was on the wildlife of these regions, notes were also made about other factors associated with the dramatic increase in visitor numbers experienced. The issue of 'fly camping' has been a significant factor since the re-opening of the National Park in July 2020, with large numbers of people camping unlawfully around popular sites such as Cwm Idwal in the Ogwen Valley, and often leaving large amounts of litter, waste and toiletries in the immediate area. Observations relevant to this issue were recorded on the survey visits: a total of 15 tents were recorded on the edge of Llyn Idwal on 12th June 2021, along with several inflatable watercraft that could cause disturbance to species like the Great Crested Grebes and Common Sandpipers mentioned earlier in the report. Two tents, and a bag full of discarded litter, were recorded on the edge of Llyn Cau (Cader Idris) on 27th June 2021; and three tents were recorded around the lakes north of Yr Elen (Carneddau) on 13th June 2021, but with no obvious associated litter left here.



'Fly camping' was recorded in some areas during the 2021 surveys. These tents were photographed on the edge of Llyn Idwal on 12th June, despite many signs alerting visitors that camping is currently forbidden throughout the 2021 season in areas such as here.

Footpath erosion and riverside vegetation pressure.

Particularly popular footpaths were showing signs of widening and subsequent erosion on the vegetation and soil communities nearby. For example, the main footpath ascending Y Garn from Twll Du (Cwm Idwal) is in danger of widening further and impacting the sensitive communities of Dwarf Willow (*Salix herbacea*) growing on the ground here. In Ceunant Llennyrch, footpaths in the river gorge and along the riverbank are impacting on important communities of ferns and mosses in some areas. The rapidly growing popularity of the waterfalls below Cwm Llan (accessible along Yr Wyddfa / Snowdon's Watkin Path) has led to a number of new footpaths being trodden to the river edge, and much vegetation compaction along the river's sides in a number of areas.

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