

Why society needs nature

Lessons from research
during Covid-19



May 2021

The Big Picture

Here are some of the main findings from the research:

Outdoor visits:

- There was a polarised picture of experience, while some people's interaction with nature increased during the pandemic, others visited nature less or not at all.
- Between April and June 2020, 40% of adults in England reported that they had spent more time outside since the coronavirus restrictions began, whilst over a third (35%) reported that they had not visited at all in the last 14 days.
- There was a similar picture in Scotland during the initial lockdown period. While the proportion of people taking regular outdoor visits was higher than expected for the time of year, almost a fifth of adults took no visits at all.
- In Wales, most forest sites and national nature reserves managed by Natural Resources Wales (NRW) saw a 90% reduction in visits during the first lockdown in March to June 2020, but a substantial rebound during the more open summer season from July to September, with visitor numbers at some sites almost doubling compared to previous years.
- Six in ten children reported spending less time outdoors since the start of coronavirus, more than double those who spent more time outside.
- Overall, the number of adults visiting natural spaces in England in spring 2020 was lower than expected. This was also found in the site-based data from Wales.

Reasons for not visiting and barriers:

- In both England and Scotland, staying at home to stop coronavirus spreading/adhering to government restrictions was the top reason for not spending time in nature. This was also reflected in case study responses to site visits in Wales, along with Covid-related land management restrictions such as car park closures.
- Socio-economic status, age and health status had an influence on people's ability to access nature.
- The research suggests the Covid-19 pandemic may have exacerbated existing inequalities in access to nature. In England, visit habits of people on lower incomes, with lower levels of education, and living in more deprived areas have been disrupted in a negative way by Covid-19, whereas other groups have reported their habits being disrupted in a positive way, for example, that they are getting outside more.

Place and activity:

- Urban green spaces were the most frequently visited of all natural spaces.
- In Scotland, most people adhered to the 'stay local' message of spring 2020. Visits to coastal locations and to more remote or rural places decreased while more use was made of local greenspace. This was also reflected in the site-based data from Wales.
- Walking was the most popular activity, enjoyed by the majority of adults.

- **Having access to a garden was seen as very important to those who had one. However, one in eight households in Britain do not have a garden. People from ethnic minorities and those living in poverty are much less likely to have access to a private garden.**

Benefits:

- **74% of adults in England took more time to notice and engage with everyday nature (listening to birdsong, noticing butterflies). In Scotland, there were also increased levels of participation in watching wildlife and other nature engagement activities. Equally, qualitative research found that one of the main reasons for people visiting Natural Resources Wales' sites was to 'be in nature'.**
- **Positive environmental changes such as reduced noise levels, reduction in pollution and noticing more wildlife were noted in Scotland during lockdown.**
- **In England, people reported environmental behaviour changes such as driving less and reducing food waste. In Wales, it was found that although consumption and food waste had reduced substantially during the early period of Covid restrictions, it began to creep back up again during the year.**
- **Green and natural spaces were seen as places that should encourage mental health and exercise by 89% of people in England. 70% of people in Scotland reported mental health benefits from enjoying nature. Qualitative data from Wales also reflected these wellbeing and mental health benefits.**
- **Over 80% of adults in England across different population groups reported that being in nature makes them very happy. Eight in ten (83%) children in England also agreed that being in nature made them very happy.**
- **Green and natural spaces were seen as places that should encourage physical health and exercise by 82% of people in England. More than half (56%) of outdoor visitors in Scotland agreed their visits improved their physical health.**
- **Around half of people (49%) in Scotland expected to visit the outdoors more often once the crisis was over.**
- **In England, environmental issues were ranked as the 3rd most important issue, behind health and the economy.**
- **In Wales, concern about climate change and the destruction of nature/biodiversity was almost as high as concern about Covid 19, with plastic waste also in the 'top four' issues. The majority (74%) considered that climate change should be addressed as a matter of urgency.**

Issues and problems

- **Unprecedented visitor numbers at some sites, created recreational 'hot spots', with negative environmental impacts experienced; from unsuccessful breeding of rare bird populations to overcrowding and littering at bathing water and green space sites.**

Data sources:

References to England come from The People and Nature Survey for England surveying a representative sample of adults. Data collected for Q1 report from April - June 2020, and monthly indicators April - Dec 2020.

References to Scotland come from NatureScot's survey to monitor the impacts of Coronavirus and social distancing surveying a representative sample of Scottish adults. Data collected for Wave 1 from 29 May - 5 June 2020 and for Wave 2 from 5 - 12 Sept 2020.

References from Wales come from Natural Resources Wales' Forestry and NNR Visitor Data Report. Data from people counters located in forest sites and nature reserves collected from Jan - Sept 2020.

References to children come from The People and Nature Survey for England: Children's Survey. Data collected from 6 - 18 August 2020.

The report also includes findings from Forest Research's Engagement with nature before and during Covid restrictions project, surveying a sample of adults already engaged with nature. Data collected from mid June - end of July 2020.

Introduction

Nature is one of our greatest assets. It is well known that connecting with the natural environment has many benefits for our physical health and mental wellbeing. So, what happened when our access to outdoor spaces was changed during Covid 19?

This evidence-based research report offers an insight into the impact of the Covid-19 pandemic and the associated lockdown restrictions of 2020 on people's interaction and relationship with nature throughout Great Britain.

A collaboration between the Environment Agency, Natural Resources Wales, NatureScot, Natural England and Forest Research, this document summarises the collective research carried out by these organisations to provide a snapshot of how people visited nature and their experiences of it during this time.

We look at different groups of people of varying ages, ethnic and socio-economic backgrounds, the places they visited, what activities they took part in and the benefits they gained from getting out and exploring parks, forests, rivers and coasts.

Tracking changes in how people visit the environment is pivotal for the various agencies' roles in promoting recreation and encouraging engagement with nature for everyone. With a seismic increase in visitors at a number of sites, turning them into recreational 'hot spots', agencies recorded useful practitioner experience for managing these sites in the future. This experience is captured throughout this report as a series of practical case studies.

The findings from this summary of research paint a polarised picture of experience, with some people's interaction with nature increasing during the pandemic, while for others, Covid-19 meant they enjoyed less time in nature than expected for the time of year. What remains clear however, is that the natural environment can have a significant role to play in helping people cope during difficult times such as this pandemic.

Ensuring adequate investment in protecting and promoting our green and blue spaces is vital. Connecting with nature has numerous benefits for our health but it must not be at the detriment of the wellbeing of the abundant species with whom we share this incredible planet.



The natural environment can have a significant role to play in helping people cope during difficult times

Visits to natural spaces

The national picture of visits to nature during the pandemic indicated a polarisation of experience, with some making more frequent visits, whilst others made no visits at all.

While 40% of adults in England increased the amount of time they were spending outdoors since coronavirus restrictions began, just over one in three (35%) had not visited a green and natural space in the last 14 days. This situation was mirrored in Scotland during the initial lockdown when visits to nature were higher than expected at this time of year, yet almost a fifth of adults took no visits at all.

Equally polarised was the contrast in the number of visits during and after lockdown. Site based data from Natural Resources Wales found that during the first lockdown in April - June 2020 there was a substantial decrease (80-95%) in visits compared to the same period in 2019. This was followed by an equally significant increase in visits to a number of popular sites when the countryside opened back up again in the mid-late summer. Such extreme 'peaks and troughs' of visitor numbers far exceeded any usual seasonal differences.

In England, fewer children had spent more time outside since coronavirus started than adults. Six in ten children reported spending less time outdoors since the start of coronavirus, more than double those who spent more time outside.

Research also showed that socio-economic factors play an important role in who is visiting natural spaces, with adults on lower incomes, with lower education, the unemployed and those living in the most deprived areas making fewer visits.

Education

Adults with higher educational attainment are more likely to visit a natural space. 66% of adults with a university degree (or above) in England had visited nature in the last 14 days compared to 37% of adults with no qualifications.



40% of adults
had increased
the amount
of time spent
outside

*Source: The People and
Nature Survey for England
April-June 2020*



35% of adults
had **not**
visited a
natural space
in the last 14
days

*Source: The People and
Nature Survey for England
April-June 2020*

Income

There is a positive relationship between income and visits; as you earn more you are more likely to get outside in nature. 44% of people living in household earning £15,000 or less (below the relative poverty line) in England visited nature, compared to 70% of people living in households earning £50,000 or above.

Employment

Working adults in England are more likely to have made a visit to a natural space in the last 14 days (64%) than those not in work¹ (49%).

Living in deprived areas

Only 45% of adults in England living in areas ranked as most deprived had visited a natural space in the last 14 days, compared to 68% of adults in the least deprived areas.

In Scotland, while most people (75%) agreed in spring 2020 that their local greenspaces were within easy walking distance of home and of a high enough standard for them to want to spend time there, this was lower among those living in the most deprived areas, people not in good health and those with a long-term limiting illness or disability (all 66%).

One in eight British households has no garden².

71% of the population in Scotland has access to a private garden. However, levels of access are lower among those living in the most deprived areas and people with no access to a car.

Other factors also influence who visits natural spaces.**Older adults**

51% of adults aged 65+ in England had taken a visit in the last 14 days, compared to 62% of 16-39 year olds. During spring 2020, 57% of adults aged 70 and over in Scotland visited the outdoors at least once a week compared to 71% of all adults.

Long-term illness or condition

47% of adults in England with a long-term (12+ months) illness or physical or mental health condition had visited nature, compared to 62% without illness. In Scotland, those who were not in good health were most likely to report spending less time outdoors than usual, with the main reasons being a desire to follow the rules and stay safe.

Families with children

In England, 65% of adults with children visited a natural space in the last 14 days, compared to 56% of adults without children.

¹Includes unemployed, long-term sick/disabled, looking after children/ house/other caring responsibilities and retired.

²Source: Office for National Statistics (ons.gov.uk).



Nature and children

Natural England commissioned research to specifically understand the perspective of children and young people in England relating to nature during Covid-19.

Coronavirus has had an impact on children's mental health and wellbeing, with around half (48%) saying that being worried about catching/spreading coronavirus had stopped them spending more time outside. 6 in 10 (60%) reported spending less time outdoors since the start of coronavirus, more than double those who spent more time outside (25%).

Most children's experiences of nature during coronavirus was local. 62% reported playing in gardens and the same figure had visited a park, playing field or playground.

Children's access to nature during coronavirus varied across the population reflecting similar socio-economic trends among the adult population.

Environmental concern was high among children across all socio-economic groups in England, with eight in ten agreeing that they would like to do more to protect the environment.

Has coronavirus made inequality of access worse?

In England, when estimates of how often adults visit natural spaces on average over 12 months were compared with how often they reported actually visiting in spring 2020, the results showed fewer visits for low income groups than for high income groups. A similar pattern was seen for educational attainment (fewer visits than usual for those with no qualifications) and related to deprivation (those living in the most deprived areas made fewer visits than usual).

Time spent in nature

The proportion of adults in England who had visited a green and natural space within the last 14 days increased gradually from April 2020 (49%) to September and then decreased overall to December 2020 (64%). The proportion of adults not making any visits within the last 14 days fell from 46% in April to 26% in November.

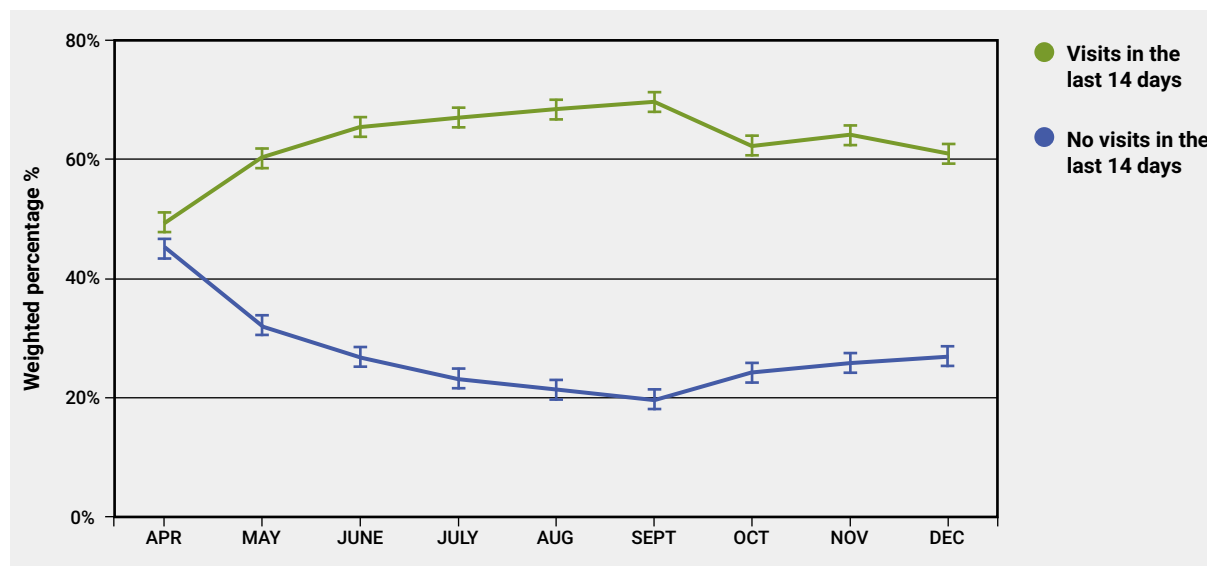


Figure notes: Source: *People and Nature Dec 2020 Monthly indicator report*.

Question: How many times, if at all, did you make this type of visit to green and natural spaces in the last 14 days?

(1) Data collected between April 1 and December 31 (inclusive).

(2) The sample for this question were 1,868 (April), 1,898 (May), 1,872 (June), 1,889 (July), 1,856 (August), 1,866 (September), 1,854 (October), 1,869 (November) and 1,863 (December) respondents. English Adults.

(3) Error bars represent the 95% confidence interval of the mean.

In Scotland, 71% of adults visited the outdoors at least once a week during the initial lockdown period, increasing to 80% by late summer 2020. Over the same period, the proportion of people taking no outdoor visits almost halved (down from 19% to 10%). The proportion of people who reported spending less time outdoors than usual also declined between spring and late summer 2020 (down from 42% to 24%).

40% of the adult population in England spent more time outside in spring 2020 than before Covid-19. This figure remained consistent into winter.

At the majority of Natural Resources Wales' recreation sites in Wales, there was a large decrease (80 - 95%) in visitor numbers during lockdown between April and June 2020. Following easing of lockdown restrictions between July and September, many sites then saw a significant increase in visitor numbers, while several sites continued to see a fall in visitors compared to the same period in 2019. This was due to a range of issues, including site restrictions, tree felling and limited car parking to manage visitor numbers.



Benefits of natural spaces

The benefits to physical health and mental wellbeing of spending time in nature are well documented.

Over half of people in Scotland said their physical health had improved after spending time in natural spaces, with 70% of respondents acknowledging that it had boosted their mental health and wellbeing. Survey results from Wales also reflected these wellbeing and mental health benefits.

The top 4 benefits of engaging with nature, in the Forest Research survey, that had 'significantly change for the better' (for 30% of respondents) during Covid-19 were: 1) 'A feeling of escape and freedom', 2) 'Mental wellbeing benefits', 3) 'Enjoyed my activity with family in my household', and 4) 'Gaining a sense of solace from engaging with nature'. The survey also found that: 'Taking children out', 'extra time as schools were closed', 'exercise', 'mental' and 'physical wellbeing' all scored highly as motivations for visiting nature during the Covid-19 restrictions.

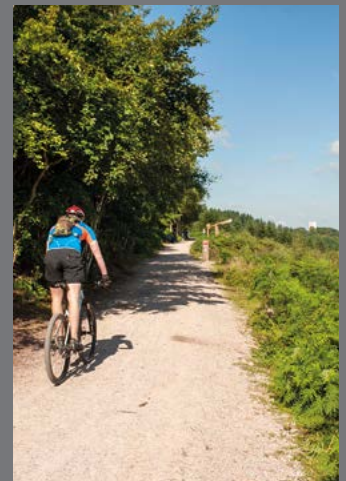
Resilience to restrictions at forest sites

With many Forestry England sites closed to cars during lockdown, the Active Forests programme has successfully helped to encourage more people to be physically active while following Covid guidelines.

The Active Forests programme runs on 18 Forestry England sites. The programme aims to encourage physical activity by improving and developing trails for running as well as maximising usage of existing walking and cycling trails. It also provides a wide range of events and regular organised activities from buggy fit to parkrun.

During lockdown restrictions, site events were suspended, car parks closed and much of the monitoring data was stopped. However, people counters at some of the sites and an online survey captured evidence of who was engaging with the sites. Between April and June, despite restrictions, counters recorded similar numbers of trail visits to the previous year, while data for July to December showed a marked increase in the number of visits compared to 2019.

Forestry England was able to continue to communicate the benefits of accessing forests for physical activity. The counter data showed that many took the opportunity to do so and helped to record the substantial resilience of the Active Forests programme to the restrictions.



Get on your bike – encouraging the use of cycling trails. Image © Simon Stuart-Miller

Feeling connected to nature during Covid-19

In England, during spring 2020, 85% of adults reported that being in nature makes them happy and this was consistent across different population groups.

One of the main reasons for people visiting Natural Resources Wales' sites was to 'be in nature'.

Scotland saw increased participation in wildlife watching and other nature engagement activities during the pandemic. Taking more time to notice, engage with and appreciate everyday nature such as listening to birdsong was noted by nearly three-quarters (74%) of people in England. However, there were variations between gender, area and economic circumstances.

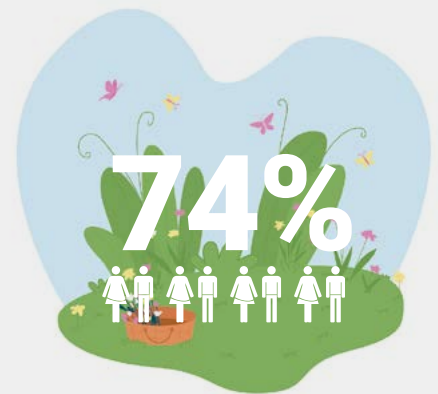
In England, more women (77%) than men (69%) agreed that they were taking more time to notice and engage with everyday nature; those living in poverty were less likely to notice nature more (65%) compared to those not in poverty.

Nature plays a positive role in supporting children's wellbeing, as more than 8 in 10 in England (83%) said being in nature made them very happy.

Adults in England reporting on children in their care also stated that children benefit from getting out in nature, with a third of adults with children wishing their children could spend more time outside in nature to support their physical and mental health.

74% of adults in England agreed that they took more time to notice and engage with everyday nature

Source: The People and Nature Survey for England



Left: Connecting with nature

A journey of local discovery

Interviews carried out by Forest Research looking at people's engagement with nature during lockdown highlighted the importance of accessing nearby natural spaces.

With the one-hour a day exercise restriction imposed, people took the opportunity to discover new places to explore locally or rediscover and enjoy known routes. Taking more time to notice and connect with nature brought a sense of freedom and calm. There was a heightened appreciation of nature as it helped provide a sense of enjoyment and solace during the difficult times people were facing.

Concerns about staying socially distanced meant some people changed the time of day they went out in nature to avoid others.

In the first lockdown, Forestry England site facilities and car parks were closed. People who lived nearby could still access sites on foot or by bike, but inequalities were highlighted for those who had little accessible nature near to where they lived.

This included those with no garden; those living in busy urban areas with overcrowded greenspaces; those with busy jobs and those shielding.

Forestry England moved quickly to provide a range of online content to encourage people to connect with trees and woods; from fun activities for children to promoting approaches such as mindfulness and 'forest bathing' to nurture mental wellbeing.

© Forest Research

”
Taking more
time to notice
and connect
with nature
brought a
sense of
freedom and
calm

”
We were always so busy before lockdown,
walks were for exercise, but now we spend
time actually enjoying what's around us



Barriers to accessing natural spaces

The main reason preventing people from spending free time outdoors in both England and Scotland between April and September was the desire to adhere to government restrictions and to prevent coronavirus from spreading.

In England, being too busy (at work, home or with family) and poor health/wellbeing were also given as highly cited reasons for not connecting with outdoor spaces. Bad weather was cited as the main barrier from October 2020.

In Wales, qualitative case study data found that some respondents felt that the restrictions associated with Covid 19 directly prevented their use of the woodland, affected their access due to car park closures, or limited their visits due to the lack of group activities.

Problems encountered

Some people encountered problems on their outdoor visits during lockdown. In Scotland, the most common problem was other people behaving inconsiderately or irresponsibly, cyclists on pavements and difficulties maintaining social distancing while outside. In England, the main concerns of those who hadn't visited in the last 14 days were anti-social behaviour, lack of facilities and other people.

In the Forest Research survey households with children under 16 were significantly more likely to report 'lack of facilities' (toilets/benches) due to Covid-19 restrictions as a barrier to spending time outside in nature.



Left: Making a splash over bathing water status – River Wharfe, Ilkley

Messing about on the River Wharfe

The Ilkley Clean Rivers Group has campaigned for an end to sewage discharges into the River Wharfe and successfully applied for bathing water status.

The River Wharfe runs through the town of Ilkley in West Yorkshire and is a key feature of the historic town. Attracting a large number of tourists, people often go to the river to picnic, walk and to fish.

The Ilkley Clean Rivers Group has campaigned for the last 2 years to stop sewage being discharged into the river. It has also applied for bathing water status for a stretch of the river. The group met with the Environment Agency and Yorkshire Water, stating that they wanted the water quality to be good enough for swimming and paddling.

During 2020, large numbers of people visited the town and adjoining areas. In the summer, large groups gathered, jumping into the water and leaving large amounts of litter. There were also large traffic jams and full car parks.

While the Environment Agency will regularly monitor bathing water quality in the River Wharfe, there are ongoing challenges to achieving the required water quality as well as management of the area now bathing water status has been granted. Bathing water status is likely to attract more people, which will place greater pressure on the local environment, with resulting issues such as overcrowding, traffic congestion, litter and health and safety issues.

The Ilkley Clean Rivers group's achievement has spurred other communities in Bath, Oxford and the River Thames in their campaign for better river quality and bathing water status.

Environmental changes, attitudes and behaviours

In England, environmental issues were ranked as the third most important issue facing people during the pandemic, after health and the economy.

Covid-19 has impacted both on people's attitudes and behaviours towards the environment.

During spring 2020, 69% of adults in England reduced the amount they drove or travelled by car. This figure rose for older people (82% of 65+) compared to young adults (59% of 25-39 year olds).

38% of adults reduced the amount of food they throw away. For those with children, this figure rose to 47% as opposed to 35% for those without children.

In Wales, it was found that although consumption and food waste had reduced substantially during the early period of Covid restrictions, it began to creep back up again during the year.

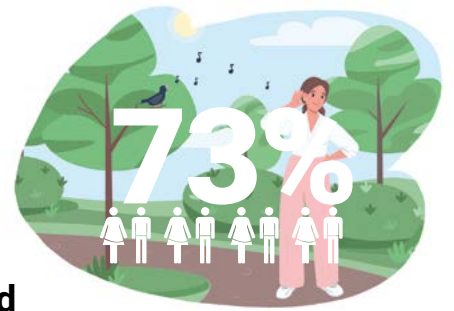
Asked about their attitudes towards the environment, an overwhelming majority (86%) of respondents in England said that protecting the environment was important to them personally, with 85% saying that they are concerned about damage to the natural environment.

In Wales, concern about climate change and the destruction of nature/biodiversity was almost as high as concern about Covid 19, with plastic waste also in the 'top four' issues. The majority (74%) considered that climate change should be addressed as a matter of urgency.

In Scotland, many people noticed positive environmental changes in their local area during the spring 2020 lockdown period, with 73% noticing reduced noise levels, 61% a reduction in pollution and 61% noticing more wildlife and nature than normal.

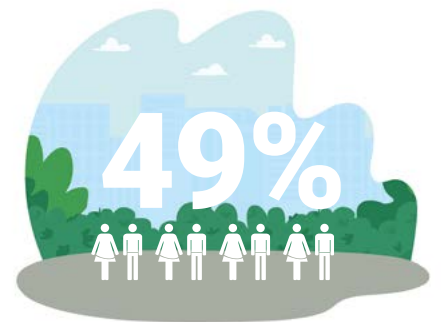
Many respondents felt that they would aim to sustain the changes they had made once restrictions were reduced or lifted.

In Scotland, around half of the population (49%) expect that the amount of time they spend visiting the outdoors for leisure, recreation or exercise will be greater after lockdown than it was before. Many people are also



73% of adults
in Scotland
noticed
reduced
noise levels

Source: NatureScot report



49% of adults
in Scotland
expect to
spend more
time visiting
the outdoors
after
lockdown
than before

Source: NatureScot report

interested in making other positive lifestyle changes when lockdown is over. Over two thirds of adults (69%) would like to encourage their children to spend more time outdoors, while similar numbers would like to continue to travel less for non-essential journeys (66%) and make more use of local greenspaces (61%).



Natural places

As lockdowns imposed both timing and location restrictions on people's ability to connect with nature, we take a look at the types of places that became popular, the activities carried out and novel ways of interacting with nature.

What types of natural spaces did people visit?

Research from England showed that **urban greenspaces** such as parks, fields or playgrounds were the most frequently visited of all green and natural spaces.

In a survey of people already connected to and engaged with nature, visits to 'woodlands/forests', 'fields/farmlands/countryside' were more resilient to Covid-19 restrictions (see *Forest Research case study – 'Resilience to restrictions at forest sites'*) and dropped by a smaller percentage than visits to 'beaches/coastline', 'historic properties/country parks', 'nature/reserves', 'hills/mountains/moorland'. Urban greenspaces were also shown to be resilient to restrictions.

This may be due to a number of factors: many historic properties were closed during the first wave of Covid-19 restrictions, and survey respondents' home locations would have impacted on the places they could visit, particularly when car use was discouraged, or the 5-mile distance restriction was in place.

Survey results from those who visited woods pre-pandemic also showed a positive shift in visits to woods on a weekly basis (more frequent visits), but on the other hand, people spent less time in woods overall. The interviews revealed that this was due to a range of factors, including the initial lockdown restrictions which meant some people spent less time going to the woods than usual. It was also related to location, and a desire for shorter more frequent trips for some to stay connected to nature.

In Wales, when lockdown restrictions were eased in July-September 2020, the greatest increase to NRW monitored sites was to beaches and well-known popular locations in protected landscape areas, such as Moel Famau in the Clwydian Range AONB and Beddgelert Forest in Snowdonia.

In harmony with nature in North Cardiff woodlands



A survey of woodland users in Wales helped Natural Resources Wales (NRW) learn more about the way that people value woodlands.

Carried out between August and September 2020 during a relaxation of lockdown measures in Wales, the survey concerned a number of woods in north Cardiff.

NRW worked with Cardiff County Council, The Wildlife Trust of South and West Wales, Cycling UK, Cycling Wales, private landowners and local interest groups to design and distribute the survey.

Woodlands were used for a diverse range of activities, from walking and exploring to mountain biking and cycling.

The majority of people visiting woodlands were adults aged between 35 and 49, with nearly half of all respondents going there several times a week or every day. This indicates a well-used recreational space.

Asked about the impact of Covid-19 on how they used the woodlands, the majority of people said they had visited more often during the pandemic. Many had also changed their experience, focusing on exploring, exercising, relaxing and improving wellbeing. Taking the opportunity to get away from busy areas, people practiced social distancing, avoiding certain areas and main paths.

Many people had also gone to different locations, deciding to stay local. For some, Covid-19 restrictions had prevented their visit, car parks were full or closed and group activities had stopped.

Commenting on the benefits of visiting woodlands, one respondent said, *"Even though I am lucky to have a garden, the ability to walk in such wonderful surroundings helped to take some of the fear of the pandemic away. It is hard not to believe that you will survive when you walk these woods."*

The survey findings proved that woodlands continue to be a safe place for visitors.

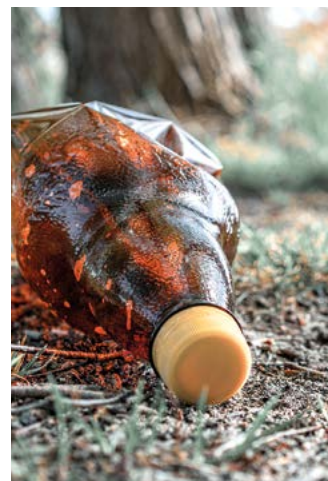
Future engagement work will help NRW learn more about the way people value woodlands, maximising the benefits to health and wellbeing in harmony with nature.

It is hard not
to believe
that you will
survive when
you walk
these woods

Impact on sites

As lockdown restrictions were eased and places began to open up, increases in visitor numbers resulted in a range of problems for visitor experience and for site impact. These included overflowing litter, fly-tipping, deposits of human waste and a lack of public toilet facilities. A fear of overcrowding and inability to maintain safe social distances was exacerbated in some places by narrow pathways.

Some of these 'problem' issues reported by the public and site staff in England were due to a lack of staff time and maintenance (both in relation to visitor numbers but also due to Covid-19 impacts on staffing) as well as facilities at many sites being forced to stay closed.



Although the data from the various surveys clearly showed the significant impact of lockdown on visitor numbers and the 'rebound effect' of easing restrictions, it is important also to take into account detailed evidence and expert knowledge from site managers about individual sites, local areas and relevant land management activities.

Refreshing the Countryside Code in England and Wales to minimise impacts on nature

© Natural England

Access to nature is so important for our mental and physical health, but it is important that people access nature in a way that supports wildlife.

Throughout 2020, Natural England's 140 National Nature Reserves (NNR) remained open and welcomed unprecedented numbers of visitors. But record numbers have taken their toll on these important places of nature conservation, with high volumes of problem incidents recorded. These included dogs off-lead disturbing wildlife, anti-social behaviour, vandalism, fly-tipping, wildfires and illegal parking.

This disturbance has significantly impacted wildlife, for example, trampling of young wading birds and unsuccessful breeding of shorebirds (see 'Managing reserves to protect breeding birds' case study).

Natural England has worked to encourage and engage visitors to minimise the impacts on nature. This has included additional signage on reserves, using social media, and local communication campaigns in partnership with other land managers, councils and emergency services.

Our natural world has played an important role in the pandemic, with over 70% adults in England getting out in it at least once a week, and 88% reporting mental health and wellbeing benefits. The Countryside Code was first published seventy years ago to help the public enjoy and protect the Countryside. Recently, it has been revised and refreshed to reflect evolving public use.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/985422/Summary-Countryside-Code-A5.pdf

Impact on recreational 'hotspots'

With the easing of lockdown and the subsequent dramatic increase in visitor numbers in some areas, recreational 'hotspots' reported instances of negative impacts on the environment and wildlife.

Managing reserves to protect breeding birds

Lindisfarne National Nature Reserve saw no successful shorebird breeding outside of its designated protection areas for the first time on record.

Lindisfarne National Nature Reserve in Northumberland was founded to help safeguard internationally important wintering bird populations.

Between April and early July (national lockdown period) one of the most important breeding areas for the rare Little Tern, Ringed Plover and Oystercatcher species was largely devoid of any human activity.

However, when lockdown restrictions were lifted, the public returned to the beach and visitor numbers were high compared to previous seasons.

Although signage, boundary ropes and electric fences had been erected at key bird breeding areas, these were ignored by some visitors, resulting in human and dog footprints observed past the beach closure signs, and a large increase in wild camping and picnickers using disposable barbeques or lighting open fires.



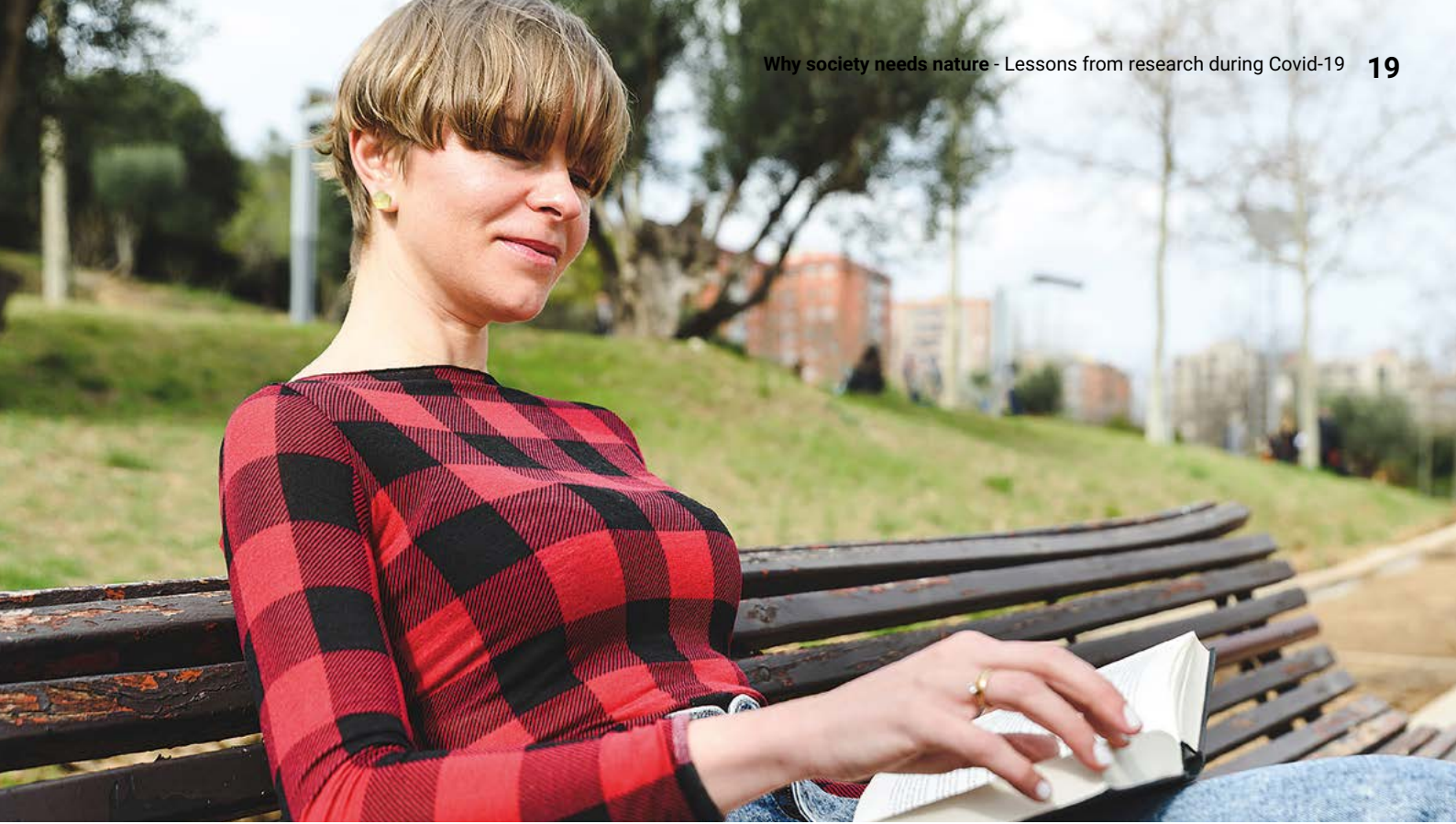
Above: Little tern feeding chick - LNNR

The Reserve's usual team of dedicated volunteers was unable to support the project due to Covid-19 restrictions, leaving further gaps in shorebird protection rotas.

Staff made regular trips to the protected sites from mid-May and 4 sites were formally protected with a daily warden presence from July. Two Shorebird Wardens were also appointed to assist site staff during the busy summer holiday period.

Moving forward the plan is to deploy more people counters at key sites which suffered from disturbance in 2020. For 2021 and beyond staff and volunteers will continue to work to protect this very special site and manage access for many thousands of visitors.

© Natural England



Distances travelled

A UK-wide survey³ found that people visited their favourite nearby natural spaces more frequently during lockdown ($\frac{1}{3}$ stayed inside or near the house, $\frac{1}{3}$ travelled less than $\frac{1}{2}$ mile).

³University of Surrey, survey size (850) representative of the UK population.

In spring 2020, almost three quarters of outdoor visitors (73%) in Scotland had only walked or cycled on their outdoor visits, adhering to the 'stay local' message of the initial lockdown period.

Just over a quarter (27%) of outdoor visitors had travelled by car or another mode of transport, with this percentage marginally higher amongst people with children (33%) and people with a limiting disability or illness (35%).

During August and early September 2020, with restrictions easing in Scotland, people ventured further afield and the proportion of people travelling by car or another mode of transport on outdoor visits more than doubled (to 59%).

In Wales, only one of the recreation sites monitored by NRW – Van Road in Caerphilly – saw an increase in visitor numbers during the first lockdown. Its location close to local communities demonstrated people's use of local greenspace and adherence to coronavirus restrictions.

Activities carried out

Walking was the most popular activity, enjoyed by the majority of adults across the population in both England and Scotland. In England, this was followed by watching wildlife. In Scotland, the second most popular activity in spring lockdown was running/jogging; by late summer it was 'family outings'. Everyone surveyed said that they spent more time during lockdown compared to the same time last year carrying out these activities.



The role of gardens during Covid-19

With so many people not getting out into public natural spaces during Covid-19, private gardens were, for some, their main way of accessing nature.

⁴Office for National Statistics (ONS) report for GB.

One in eight British households has no garden⁴. In England, black people are nearly four times as likely as white people to have no access to outdoor space at home (37% compared with 10%).

71% of the population in Scotland has access to a private garden. Levels of access are lower among those living in the most deprived areas and people with no access to a car.

Of those adults with access to a garden in England, 88% believe it is very important to them, with 71% expressing that they felt closer to nature when spending time in the garden. Popular activities included sitting and relaxing in the garden and observing wildlife.

Having access to a private outdoor space meant that for those people unable to physically get out and explore nature, for example, those who were shielding, they were still able to enjoy nature or wildlife from indoors.

Virtual connection with nature

For people with limited access to nature nearby, such as those without a garden, people living in busy urban areas where greenspaces were often overcrowded or for those shielding, finding an alternative to physical visits into nature became important.

Forestry England responded to this need, providing activities for children and a range of online content to encourage people to connect with trees and woods to improve mental wellbeing.

The University of Surrey, working with Natural England, found that many people interacted with nature content via social media during this time, and that this engagement resulted in cognitive and deep reflections about nature and helped people to cope with Covid-19 related stress.



Conclusion

Accessing the benefits of the outdoor environment became increasingly important to many people during the Covid-19 restrictions of 2020.

The evidence in this report clearly highlights that increased engagement with nature significantly helped to support many people in maintaining their physical and mental health and wellbeing during the restrictions and stresses of living through the global pandemic.

However, the research findings showed a marked polarisation of experience across the various people surveys. While many people were making more frequent visits into natural spaces, not everyone was able to benefit from accessing nature. Movement restrictions and other Covid-19 related issues, such as fear of infection, meant that a significant proportion of the population did not visit natural spaces at all, or far less than usual.

Some of the barriers included increased visitor numbers, leading to overcrowding and related fears of catching the virus and anxiety about anti-social behaviour. Agency research findings showed that being poor, less educated, living in a deprived area, being unemployed and also being from an ethnic minority all negatively impacted people's access to the benefits nature can provide. These groups have long-standing issues of accessing and participating in nature, which have been exacerbated by the Covid-19 pandemic. The agencies are working with research partners to further explore these barriers and continue to consider solutions to these long-term issues.

The negative impact of the pandemic specifically on children's wellbeing was highlighted by Natural England's Children's Survey. This is particularly concerning as the government's 25 Year Environment Plan recognises that playing and

learning outside in nature is a fundamental part of childhood and supports children's mental health and wellbeing.

Looking to the future, many people indicated that they would aim to sustain their level of engagement with the natural world in a post-Covid world. In Scotland, around half of the population expect that the amount of time they spend visiting the outdoors for leisure, recreation or exercise will be greater after lockdown than it was before.

Many people are also interested in making other positive lifestyle changes when lockdown is over. Over two thirds of adults in Scotland would like to encourage their children to spend more time outdoors, while similar numbers would like to continue to travel less for non-essential journeys and make more use of local greenspaces.

The seismic increase in visitor numbers at many of the nations' most important natural spaces indicates that there is unmet demand for outdoor recreation space, both for local (daily) use and further away (planned trips and activities). This has brought a number of environmental and land management issues to the fore, as illustrated in the national site-based data from Natural Resources Wales. Encouraging people to benefit from the great outdoors, whilst at the same time protecting nature, needs strategic planning and adequate investment in more suitable places for a range of outdoor recreation activities and the resources to maintain their quality.

It is hoped that in future the significant role green/blue natural spaces can play in improving the nation's health will be adequately recognised, with potential links to national health and wellbeing agendas.

References

FOREST RESEARCH, 2020. Engagement with nature before and during Covid restrictions. Project page:
<https://www.forestresearch.gov.uk/research/engagement-nature-and-during-covid-19-restrictions/>

Link to report:

<https://www.forestresearch.gov.uk/research/engagement-nature-and-covid-19-restrictions/>

NATURAL ENGLAND, 2020. The People and Nature Survey for England: Adult Data Y1Q1 (April – June 2020) (Experimental Statistics):
<https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-adult-data-y1q1-april-june-2020-experimental-statistics/the-people-and-nature-survey-for-england-adult-data-y1q1-april-june-2020-experimental-statistics>

NATURAL ENGLAND, 2020. People and Nature Survey for England: Monthly Interim indicators (April to Dec 2020) (Experimental Statistics)
<https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-december-2020-experimental-statistics>

NATURAL ENGLAND, 2020. The People and Nature Survey for England: Children's Survey (Experimental statistics): <https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-child-data-wave-1-experimental-statistics>

NATURAL RESOURCES WALES, 2020. Summary of Welsh site-based people counter data.
 'Natural Resources Wales Forestry and NNR Visitor Data Report. January to September 2020.'
 Prepared by Stuart France, Linetop Ltd.

NATURESCOT, 2020. Enjoying the outdoors: monitoring the impacts of Coronavirus and social distancing
 June 2020 (Wave 1 report)
<https://www.nature.scot/naturescot-research-report-1252-enjoying-outdoors-monitoring-impact-coronavirus-and-social>

NATURESCOT, 2020. Enjoying the outdoors: monitoring the impacts of Coronavirus and social distancing
 September 2020 (Wave 2 report)
<https://www.nature.scot/naturescot-research-report-1255-enjoying-outdoors-monitoring-impact-coronavirus-and-social>

UNIVERSITY OF SURREY, 2021. Nature engagement & wellbeing pre, during & post Covid-19: Supporting the UK (green) recovery. An ERC-funded project in partnership with Natural England.
<https://www.surrey.ac.uk/research-projects/people-and-nature-pandemic-studying-nature-engagement-and-wellbeing-pre-during-and-post-covid-19>

Timelines of coronavirus restrictions in each country:

Wales: <https://research.senedd.wales/research-articles/coronavirus-timeline-welsh-and-uk-governments-response/>

England: <https://www.health.org.uk/news-and-comment/charts-and-infographics/covid-19-policy-tracker>

Scotland: <https://spice-spotlight.scot/2021/03/19/timeline-of-coronavirus-covid-19-in-scotland/>

Report contributors

Environment Agency

An executive non-departmental public body, sponsored by the Department for Environment, Food & Rural Affairs. Works to create better places for people and wildlife, and to support sustainable development.

Steering group member:

Anna Lorentzon

anna.lorentzon@environment-agency.gov.uk

Case study contributor:

Dr Jatinder Singh Mehmi

Forest Research

The Research Agency of the Forestry Commission and the leading UK organisation engaged in forestry and tree-related research.

Steering group member and
case study contributor:

Dr Liz O'Brien

Natural England

The government's adviser for the natural environment in England helping to protect and restore the natural world. An executive non-departmental public body, sponsored by the Department for Environment, Food & Rural Affairs.

Steering group member:

Dr Beth Brockett

Case study contributors and research:

Andrew Craggs

Mike Downey

Dr Rose O'Neill

Professor Birgitta Gatersleben,
University of Surrey

Natural Resources Wales

The largest Welsh Government sponsored body, principal adviser to Welsh Government and adviser to industry and the wider public and voluntary sector, and communicator about issues relating to the environment and its natural resources.

Steering group member:

Dr Sue Williams

Case study contributors:

Liz Felton

David Bleines

NatureScot

Scotland's nature agency working to improve the natural environment in Scotland and inspire everyone to care more about it.

Steering group member:

Aileen Armstrong

For more information about this report, contact:

Anna Lorentzon

anna.lorentzon@environment-agency.gov.uk

Suggested way to cite this report:

**Armstrong, A., Brockett, B., Eustice, T.,
Lorentzon, A., O'Brien, L., Williams, S.**

**(2021) Why Society Needs Nature: Lessons
from Research during Covid-19.**