



Leverhulme Centre
for Nature Recovery



Large-scale social surveys on people and nature relations: Report on the state of the art in the UK

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Background to this report



This report is the result of collaboration funded by Research England's Policy Support Fund via the Oxford Policy Engagement Network (OPEN) Seed Fund. It formed part of work completed under the Leverhulme Centre for Nature Recovery at the University of Oxford. The project was led by Dr. Jasper Montana at the University of Oxford in partnership with Dr. Tom Marshall at Natural England and Dr. Caitlin Hafferty at the University of Oxford. Research assistance was provided by Clare Ferguson.

The report has been developed and refined in connection with a workshop on 'Social surveys on people and nature in the UK: Opportunities and challenges' held in July 2023 at the School of Geography and the Environment at the University of Oxford. The workshop was co-organised by the University of Oxford and Natural England and involved 20 participants from UK government departments and arms-length public bodies, NGOs, and academics.

Executive summary

Collecting reliable and consistent data about people's relationship with the natural environment is likely to be crucial to effective policy delivery by governments. Social surveys are a prominent tool in delivering this insight. In the UK, surveys on people's relationship with nature are run by government bodies, non-governmental organisations, academic researchers, and others. This scoping assessment identifies the range of such surveys that are taking place within the UK (as of August 2023) and considers why survey data is being collected and by whom. It finds that existing surveys ask questions to both representative and non-representative samples of the UK public to provide information on measures including: frequency of visits to natural spaces; activities undertaken when in natural spaces; barriers to these visits; attitudes to the natural environment; awareness of perceived threats to nature; any pro-environmental behaviours that might be undertaken; and the kinds of well-being benefits that individuals may obtain from engaging with the natural world. However, the report notes that collecting reliable and consistent data within the UK presents challenges. The environment is a devolved issue and therefore data is collected differently in the four UK nations by distinct technical and advisory bodies. Furthermore, there is currently limited coordination and consistency between non-governmental organisations in the kinds of data collected and how that data is shared. There is great potential for enhanced collaboration and coordination between organisations. There is also a need for greater awareness amongst the potential users of survey data about what is available and how they can best request, resource, and utilise the best available evidence on people and nature to support their strategy and decision-making.

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Understanding and enhancing the relationships that people have with nature is increasingly recognised as important not only for benefits to the natural environment through pro-environmental behaviours, but also improved human health and well-being ([Martin et al, 2020](#); [Russell et al, 2013](#)). Access to and use of green and natural space in urban areas, for example, has been shown to improve health outcomes, including both physical and mental health (van den Berg et al, 2015). Engagement with nature through volunteering and educational activities can enhance personal well-being through nature connectedness and increased social cohesion ([Richardson et al, 2020](#); [Oh et al, 2022](#)). And place attachment might support more careful engagement with the natural world and reduced recreational disturbance ([Gruas et al, 2020](#); [Vaske & Kobrin, 2001](#)). The promise of these benefits suggests that governments and other stakeholders should seek to request, resource, and utilise the best available evidence on people and nature to support their attainment through strategy and decision-making.

In the UK, responsibility for the environment is a devolved issue and is therefore within the jurisdiction of the administrations of the four UK nations. Government departments with environmental responsibilities in England, Northern Ireland, Scotland, and Wales are typically supported by arms-length public bodies that play technical and advisory roles and often support government departments with the collection and delivery of data to enhance decision-making. For example, Natural England, the Environment Agency, the Marine Management Organisation, and others support work in England. NatureScot, Natural Resources Wales, and the Northern Ireland Environment Agency within the Department of Agriculture, Environment and Rural Affairs support work in the other UK Nations. The Joint Nature Conservation Committee (JNCC) offers support at the UK-wide level.

There are a range of policy areas that intersect with the evidence base on people's relationship with nature. In England, for example, the Environmental Improvement Plan 2023 (the first revision of the 25 Year Environment Plan) sets out the goal (10) of enhancing beauty, heritage, and engagement with the natural environment ([Defra, 2023](#)). This includes a commitment to "work across government" to ensure "that everyone should live within 15 minutes' walk of a green or blue space." This is sought to be delivered through a £14.5 million 'Access for All' programme, the refurbishment of green spaces through the Levelling Up Parks Fund, improvements in the quantity, quality, and permanency of woodland access, amongst other actions. At the international level, the Kunming-Montreal Global Biodiversity Framework agreed in December 2022 sought to define "an ambitious plan to implement broad-based action to bring about a transformation in our societies' relationship with biodiversity by 2030" ([CBD, 2023](#)). This multilateral environmental agreement commits signatories (including the UK) to several goals and targets, such as target 12, which seeks to:

“ Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, [...] and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanisation and to the provision of ecosystem functions and services.”

In developing an evidence-base to support and monitor progress towards these policies, there are several challenges. For the UK, the devolved administrations and their distinct public bodies mean that gathering UK-wide survey data on people and nature relations falls outside of any of their individual remits. This creates a challenge for the government in designing and evaluating UK-wide policies that might need to understand trends across sites and scales. The extent to which survey data sets exist across the UK nations and whether they may be comparable has not previously been assessed.

Box 1: What is a survey?

A survey is a data collection tool that typically uses one or more questions to collect information from a respondent. Conducting a survey typically involves respondents providing written responses to questions, either online or on paper, but can also involve respondents answering verbally. Common surveys include electoral and opinion polling (i.e. on voting intentions) and feedback surveys (i.e. ratings on cafés and restaurants). Unlike a census, surveys do not require everyone from a population to respond, but instead elicit information from a sample (or subset) of that larger population. The analysis of survey responses can then provide insights into the characteristics and attributes of that population. However, depending on survey design, some surveys will offer a representative sample of the population (meaning that broader trends can be extrapolated from the results), while other non-representative surveys do not offer an indication of broader trends but can still provide insights into correlations and associations that may be present in that broader population. Surveys are used extensively in market research, advocacy, journalism, and academic social research in psychology, sociology, etc.

Part 1: Government survey data sets in the UK

There are several publicly available government data sets that are collected via surveys on people's engagement, access, understanding of and attitudes to the natural environment across the UK. In total, this study identified eighteen regular surveys, many applying only to one of the UK nations (Table 1.). In most cases, the questions relating to people's relationship with nature were just a small subset of a wider survey (i.e. relating to households or outdoor recreation). The only identified surveys that covered multiple UK nations were those carried out by Forest Research, the research agency of the Forestry Commission, which "provides research services relevant to UK and international forestry interests, informing and supporting forestry's contribution to government policies." ([Forest Research, 2023a](#)) As part of this work, Forest Research compiles data from surveys on Public Opinion of Forestry in all UK nations. Visit Britain also conducts a survey on day trips and tourist activities undertaken across multiple nations.

Significantly, as well as these large-scale population surveys, there are a range of other government-collected data sets that are not listed here. These fall outside the scope of this study, but might include cross-cutting surveys (e.g. Active Lives), international surveys (world values), policy-specific surveys, project monitoring surveys, and internal surveys.

England

In England, the largest data sets are collected by Natural England. At present, the People and Nature Survey gathers data on people in England's engagement, access, understanding of and attitudes to the natural environment, and its contributions to wellbeing. The People and Nature survey replaced the Monitor of the Engagement with the Natural Environment (MENE) survey, which has been carried out since 2009 and ran for a decade to 2019. Defra also runs a separate Survey on Attitudes to the Natural Environment, which is delivered annually, focusing on public attitudes to the environment, as well as collecting some data on nature engagement. Survey data is also collected in England by Forest Research (the Forestry Commission research arm), which has carried out the Public Opinion of Forestry Survey since 2003 and measures engagement, attitudes, and uses of forests. Additional survey data on the use of green and natural spaces, and attitudes towards the environment, for England are also collected through the Participation Survey commissioned by the Department for Culture, Media and Sport and the Opinions and Lifestyle Survey carried out by the Office for National Statistics (ONS).

Northern Ireland

In Northern Ireland, survey data collection on people's relationship with nature is predominantly driven by the Northern Ireland Department of Agriculture, Environment and Rural Affairs (DAERA). This department has regulatory responsibilities for air, land, and water in Northern Ireland, and directly supports the collection of survey data through the Forest Visitor Survey and the People in the Outdoors Monitor for Northern Ireland.

Forest Research is also active in Northern Ireland through the Public Opinion of Forestry Survey, and additional data on the attitudes to the environment, perceived threats to biodiversity, and the predominance of pro-environmental behaviours is provided by the continuous household survey. Data from these surveys in Northern Ireland is included in the government's annual Environmental Statistics report ([DAERA-NI, 2023](#)), and the data collected from Outdoor Recreation Northern Ireland is shared in online data sets, reports, and videos.

Scotland

In Scotland, the largest survey data collection effort is through the Scottish People and Nature Survey, which is carried out by NatureScot on a tri-annual basis. This survey covers a range of topics, from outdoor recreation to attitudes towards the natural environment and the health and well-being benefits associated with visiting the outdoors. NatureScot has also run the Scottish Nature Omnibus up to 2019, which evaluated people's understanding of threats to the environment and pro-environmental behaviours. This was superseded in 2021 by the NatureScot Opinion Survey (NOS). This survey focuses on public awareness and engagement with NatureScot provision and is a vehicle for gathering targeted information on issues related to the NatureScot remit (including climate change, biodiversity, creation of new National Parks, wildlife management, pro-environmental behaviours, etc). The questions posed change over time and may be collected only once, so they are not intended to provide long term trend data. Further data on outdoor activity is collected by the government through the Scottish Household Survey. Forest Research has also been conducting data collection on Public Opinion of Forestry since 2013. Data on people and nature relations is made available in Scotland in various forms. An interactive data explorer, for example, is available for the Household Survey, which allows a time series to be displayed for different questions ([Scottish Household Survey, 2023](#)).

Wales

In Wales, the collection of survey data about people's relationship with nature has been mostly centralised in the annual National Survey for Wales. This broad survey incorporates questions from across the remits of government departments, Sports Wales, the Arts Council for Wales, and Natural Resources Wales. However, during 2020/21 Natural Resources Wales worked with Natural England to develop the People and Nature Survey Wales as a 'sister survey' to that in England. This is undertaken biennially starting in 2021/22 and is the main survey in Wales focusing on people's activity in and relationship with the natural environment. In addition to the regular data collection identified here, Natural Resources Wales has also used one-off surveys in a recent 'Nature and Us' initiative, which is aiming to engage the people of Wales in a conversation about their vision for the environment in 2050. Phase 1 of this work included 3,069 survey respondents, 68 focus group participants, 126 workshop attendees and 186 webinar participants. As with the other UK nations, Forest Research carries out a separate Public Opinion of Forestry Survey in Wales. The Welsh Government also undertake one off or short-term surveys which contribute to the people and nature knowledge base, for example an upcoming (2023) 'Climate Change, Behaviour Change' survey.

Other non-nature-related surveys

There are almost certainly many surveys that are carried out by government bodies that are not captured here, but may have insights on people's relationship with nature. For example, NatureScot acknowledge that surveys such as the Scottish Health Survey, which looks at physical activity and other health indicators, may also help inform environmental policy ([NatureScot, 2019b](#)). Likewise, the Office for Health Improvements and disparities in England carries out a survey on the Wider Determinants of Health, which include access to the built and natural environment ([Office for Health Improvement & Disparities, 2018](#)).

Trends in data collection across the UK nations

There are a lot of commonalities in the topics that are covered by the various surveys across the UK nations, although the specific questions often differ (Table 1.). All nations collect information on the frequency of visits to green/ blue/ natural spaces, the barriers to such visits, activities undertaken in these spaces, potential impacts on well-being measures, and general attitudes to nature / the environment. Northern Ireland and Scotland also collect data on and perceived threats to biodiversity and several pro-environmental behaviours that people might undertake, and these were not identified for surveys in England. There is some replication of data collection within each UK nation by different surveys, although it is unclear if these different sources of data are ever cross-referenced and compared by the public bodies responsible for collecting the data.

Table 1. Topics covered by government-commissioned and publicly available surveys in the UK.

Survey	Frequency of use of green / blue / natural spaces	Barriers to visits	Activities undertaken	Attitudes to nature / environment	Perceived threats to biodiversity	Pro-environmental behaviours	Well-being measures
England							
People and Nature Survey (Natural England & Defra, 2020)	x	x	x	x		x	x
Participation survey (DCMS, 2021)	x	x	x				x
Opinions and Lifestyle Survey (ONS, 2023)	x		x	x			
Public Opinion of Forestry Survey (Forest Research, 2023b)	x	x	x				x
Survey on Attitudes to the Environment (Defra, 2020)	x			x	x	x	x

Survey	Frequency of use of green / blue / natural spaces	Barriers to visits	Activities undertaken	Attitudes to nature / environment	Perceived threats to biodiversity	Pro-environmental behaviours	Well-being measures
Northern Ireland							
Continuous Household Survey (NISRA, 2017)				x	x	x	
Northern Ireland Forests Visitor Survey (DAERA-NI, 2019)	x	x	x				
People in the Outdoors Monitor for Northern Ireland (Outdoor Recreation NI) (Outscape, 2021)	x	x	x				x
Public Opinion of Forestry Survey (Forest Research, 2023b)	x	x	x	x			x
Scotland							
Scotland's People and Nature Survey (NatureScot, 2021)	x	x	x	x			x
Scottish Nature Omnibus Survey (NatureScot, 2019a)	x		x	x	x	x	
NatureScot Opinion Survey (NOS)				x	x	x	
Scottish Household Survey (Scottish Government / IPSOS MORI) (Scottish Government, 2023)	x						
Public Opinion of Forestry Survey (Forest Research, 2023b)	x	x	x	x			x
Wales							
National Survey for Wales (Welsh Government, 2023)				x	x	x	x
People and Nature Survey Wales (Natural England / Kantar)	x	x	x	x		x	x
Public Opinion of Forestry Survey (Forest Research, 2023b)	x	x	x	x			x
Great Britain							
Great Britain Day Visits Survey and Great Britain Tourism Survey (Visit Britain)	x		x				

Why UK governments collect survey data on people and nature

The underlying purposes or justification of the survey data collection are not always made explicit on public-facing websites. Workshop participants noted several reasons for survey data collection on people and nature, including:

- Performing statutory responsibilities;
- Tracking performance (e.g. in relation to policies, such as the Environmental Improvement Plan or Net Zero Strategy);
- Understanding trends in population-level understanding, attitudes, and behaviours to inform policy development both inside and outside government;
- Responding to ministers' interests; and
- Fulfilling international commitments.

For surveys run by Visit Britain, the surveys were also intended for data generation to support the tourism industry, with the intent of providing accurate information for the effective development of this sector of the British economy and increasing profitability.

Reporting and use of UK survey data sets

There are a wide range of possible users of government-collected survey data sets on people and nature relations. These could include, for example: Ministers; Policy teams; Other analysts, such as economic, natural capital, etc; Survey respondents themselves; Community groups; Academia; NGOs; Local Gov't; and Local Nature Recovery Strategy partnerships.

An online search found that the data collected by these survey efforts were used in a variety of contexts. For example, data from the People and Nature Survey run by Natural England is used by the Office of National Statistics as a national well-being indicator. Of course, here, only data from England is used to inform this indicator. In 2022, Natural England began the process of having data from the People and Nature Survey recognised as a national statistic ([OSRb, 2023](#)). A National Statistic is a statistic produced either by the UK or devolved administration government departments or their arm's length bodies, and it needs to be assessed and deemed compliant against the Code of Practice for Statistics ([OSRa, 2023](#)). As part of this, Natural England have been asked to identify the extent to which the data from this survey is comparable with data collected in other UK nations and may be synthesised or compared as part of a UK-wide statistic.

In other cases, data from the Great Britain Day Visits Survey and Great Britain Tourism Survey run by Visit Britain are used to support the ONS Natural Capital Teams in their reports on the financial contribution of nature to tourism spending ([ONS, 2021](#)). And, the Joint Nature Conservation Committee (JNCC), which supports the UK-government in its international biodiversity commitments synthesises the data from across surveys undertaken in the four UK nations as part of its biodiversity indicators, including the indicator relating to public engagement with biodiversity loss.

Part Two: NGO publicly available data sets

The UK is home to a wide range of environmental NGOs and charities, including those whose remit includes an interest in people and nature relations through their focus on nature and conservation, landscape management, sports and recreation, education, and green prescribing. These organisations also carry out periodic and ad-hoc surveys on people's relationship with nature.

The size and scope of surveys conducted by UK NGOs vary depending on why they are being conducted (see below). There are a range of approaches to collecting data by NGOs. Some surveys will be small project-focused surveys that are implemented in-house, or in collaboration with academic researchers, and targeting participants or beneficiaries of a particular local project in the UK or internationally. Examples of these small-scale surveys might include consultation surveys with site users and local communities for the acquisition of possible conservation sites, or volunteer surveys for those working with an NGO. In some cases, these surveys are deployed in-house working with survey software and platforms.

Others will be national-level omnibus surveys that are generally conducted through an external survey panel partner or agency. These may either be a specific survey or as part of a quarterly input of questions to quarterly surveys, such as those run by nfpResearch ([nfp Research, 2023](#)), where charities are able to receive both general and tailored results on public attitudes, brand awareness, and fundraising strategies. NGOs also can survey their membership and supporter databases independently and can do so in order to understand the attitudes of these groups to inform NGO strategies and management.

Some examples of large-scale surveys that have been carried out by NGOs in the UK in recent years.

Public Tracking Survey (WWF UK)

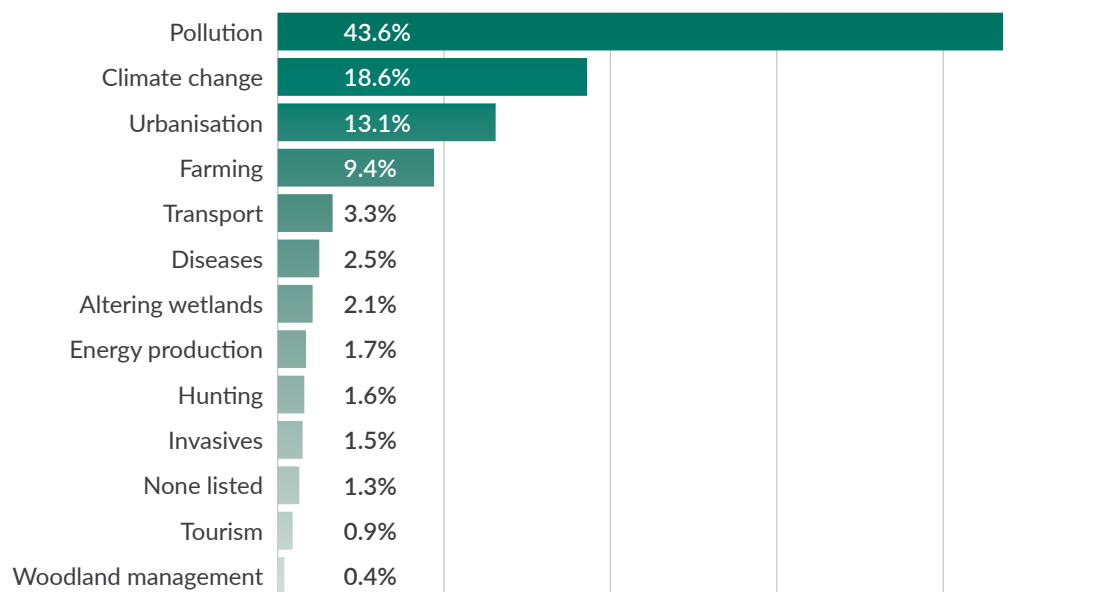
“ WWF is the world's leading independent conservation organisation. Our mission is to create a world where people and wildlife can thrive together.” (WWF, 2023b)

The Public Tracking Survey of WWF UK is an ongoing study to help inform WWF-UK's work. The survey samples 1,400 responses per month, reflecting a nationally representative sample of UK population. The survey encompasses a wide range of topics, for example including charitable awareness and giving, as well as questions on the environment and environmental attitudes and behaviours. The survey is used internally at WWF to input into planning, content, campaigns, brand tracking and other performance monitoring.

“ The Wildlife Trusts are a grassroots movement of people from a wide range of backgrounds and all walks of life, who believe that we need nature and nature needs us. [...] There are 46 individual Wildlife Trusts, each of which is a place-based independent charity with its own legal identity, formed by groups of people getting together and working with others to make a positive difference to wildlife and future generations, starting where they live and work.” (The Wildlife Trusts, 2023)

The Great Big Nature Survey covers wellbeing, nature connectedness, pro-conservation behaviours, and perceived threats to nature, with a particular focus on attitudes to nature and how it should be protected (i.e. Figure 1.). The survey aims to inform conservation strategies, to canvass the opinions and priorities of the members and supporters, and to establish an evidence base to hold government to account over its environmental policies and priorities (The Wildlife Trusts, n.d.).

Figure 1: Results from the Wildlife Trusts Great Big Nature Survey on the question “Which, if any, of these do you think has the most negative impact on nature in the UK?” (Unpublished data.)



Boater Census Survey (Canal and River Trust)

“ The Canal & River Trust is the charity working to care for a 2,000-mile-long, 250-year-old network of canals, rivers, reservoirs, and docks, because we believe that life is better by water. Our vision is to have living waterways that transform places and enrich our lives, for today and generations to come, and boating is at the centre of that.”
([Canal & River Trust, 2022](#))

This survey was run for the first time in 2022 by the Canal and River Trust. The survey sampled 9,530 boat licence holders and sought to understand the demographics of those using canals and rivers in the UK. The survey asked about the characteristics of the boats used by the boaters, information about the areas of the country where boating took place, motivations for choosing moorings, and any challenges that people experienced from living on a boat.

Public Attitudes Survey (Woodland Trust)

“ ...the UK's largest woodland conservation charity. Our vision is a world where woods and trees thrive for people and nature.” ([The Woodland Trust, 2023](#))

The Public Attitudes Survey is a survey carried out by the Woodland Trust that samples the UK public. The survey seeks to understand public attitudes relating to trees and woods to support planning, marketing, and campaigns for internal teams.

Recovering together (RSPB / YouGov)

“ The RSPB is the UK's largest nature conservation charity, inspiring everyone to give nature a home and secure a healthy environment for wildlife.” ([RSPB, 2023](#))

This survey was conducted by YouGov, commissioned by the RSPB, in May 2020. The survey sampled 2,155 adults in the UK and were weighted to offer a representative perspective. The survey was intended to assess views on the role of nature throughout the Coronavirus crisis and the potential role that nature might play in recovery from this period ([RSPB, 2020](#)). The results from the survey were published in a report entitled 'Recovering Together' and used to support a campaign that included writing to City and Metro mayors in England to encourage them to place nature at the heart of recovery plans ([RSPB, n.d.](#)).

Trends in data collection across UK NGO surveys

Compared to the official statistics, the surveys conducted by NGOs are more likely to be one-off data collection efforts rather than part of continuing data collection. This means that each survey provides a snapshot of the time when it was carried out. However, unless the same questions are implemented in different surveys, they are less directly useful for assessing insights into change over time (although see above for caveats regarding issues with continuity of questions and constructs in the government commissioned surveys as well).

The Great Big Nature Survey run by The Wildlife Trusts and some surveys carried out by the WWF UK appear as a few of the exceptions to this rule. Although the time-series data from these NGO surveys is not always made public, which limits the wider usability and comparability of this data.

As the example from the Canal and River Trust survey illustrates, NGO surveys can sometimes be more narrowly focused on particular interest, user, or membership groups, and thereby support more direct understanding of the needs, values, and preferences of particular communities. NGO surveys can also sometimes be more specific about the contexts and questions that they are interested in addressing. For example, the survey conducted by RSPB was particularly focused on the role of nature in the Coronavirus crisis and recovery from it. Although there were no long-term data sets generated in the collection of this data, there was an opportunity to capture public opinion about a particular moment in time and how governments might choose to respond. This is also the case for the Woodland Trust, which may run surveys that will be more specific to woods and trees, rather than a broader focus on people's relationship or attitudes to nature as a whole that might be found in government-commissioned surveys.

Table 2: Topics covered by a small illustrative subset of NGO-commissioned surveys in the UK.

Survey; Organisation; Most recent known year	Frequency of use of green / blue/ natural spaces	Barriers to visits	Activities undertaken	Attitudes to nature / environment	Perceived threats to biodiversity	Pro-environmental behaviours	Well-being measures
Public Tracking Survey (Personal communication); WWF UK; 2023				x	x	x	
The Great Big Nature Survey (The Wildlife Trusts, 2023); The Wildlife Trusts; 2023	x			x	x	x	x
Recovering Together (RSPB, 2020); RSPB; 2020	x	x		x			x
Boater Census Survey (Canal & River Trust, 2022); Canal and Rivers Trust; 2022			x	x			
Public Attitudes Survey (Personal communication); Woodland Trust; 2020	x	x	x	x	x	x	x

Why NGOs collect survey data on people and nature relations

There are a range of reasons why NGOs in the UK collect survey data about people and nature relations. For those that engage in active environmental and conservation interventions, surveys are used as part of bespoke applied research in a defined place or with a specific population. Surveys might be evaluating the effectiveness of interventions or informing a baseline understanding of where people are at in the particular context. These localised surveys can also be useful for NGOs to gather information about what people or organisations need to implement a change or intervention.

Surveys carried out by UK NGOs are also conducted to support campaigning and media releases, which are useful for demonstrating public concern about issues and support for particular solutions. One example is the YouGov survey conducted in 2023 as part of the Save Our Wild Seas campaign run jointly by the National Trust, the RSPB and WWF ([WWF, 2023a](#)). These types of surveys can not only help with convincing policy makers about the importance of an issue, but also offer insights about who might be part of the solution and in what ways.

NGOs are also interested in following broader trends in the attitudes that people hold towards nature and how these change over time. These survey data sets can inform the writing of reports, such as the State of Nature Report produced by RSPB, which provides insights and trends information to a wide range of interested parties. When surveys are conducted as an omnibus using a nationally representative sample, these can be useful to understand an issue (such as connection to nature or actions taken for conservation) in a nationally representative way to inform policy and advocacy.

Finally, NGOs surveys on people and nature relations can also support NGOs in their brand awareness, and in the development of their membership and marketing efforts. In some cases, supporting brand awareness and building up membership is a key motivation in conducting a survey. These surveys can help understand what motivates people to give to environmental charities, but also to engage with them by giving their time. These insights can help to better target appeals for donations and volunteers towards features of the NGOs work that are of most interest to their membership.

Reporting and use of UK NGO survey data sets

The use of NGO surveys is currently largely internal to their organisations. Survey data provides insights that can be applied in planning, for campaigning and for policy development. Many are also used to develop statistics for current campaigns that the NGO might be running. For example, a 2022 survey by Rewilding Britain that focused on attitudes towards rewilding found that four in five adults in Britain support rewilding and used this data as part of a press release ([Rewilding Britain, 2022](#)) (the data from this survey is publicly available: [YouGov, 2021](#)). Survey data can also be used to provide evidence of activities, impacts and priorities to grant awarding bodies and other funders, or for engagement and marketing. In some cases, survey data sets are made available for academic researchers to analyse through negotiated partnership or are published in academic journals.

Part 3: Academic and other survey data sets

In addition to survey data collection that is led by governments or NGOs, there are a range of other publicly available survey data sets that are also relevant to understanding people's relationship with nature.

Perhaps the largest volume of other survey data on people's relationship with nature comes from academic and other research sources. This includes some survey data sets that are long-running and others that are tied to particular research projects. In addition, there are several other survey data sets that are gathered by polling companies as part of their general work to document trends over time. Finally, there are other survey data sets that may be relevant to understanding people's relationship with nature, but focus primarily on other issues. These may be government or NGO collected, but are included here due to the less direct way in which they inform people and nature-related decision-making.

Research data

Available data on the relationship between people and nature includes long running surveys, which are often funded by research agencies, such as UK Research and Innovation (UKRI), and coordinated by research organisations. The ESRC, for example, supports the collection of several data sets that ask questions that are relevant to people's relationship to nature. Some of these contain time-series data about attitudes to the environment, people's purchasing behaviour (including environmental decisions) and their attitudes to the environment (although these are not 'nature'-specific). Including, for example:

- ESRC [World Values Survey](#) (WVS)
- ESRC [Urban Big Data Centre](#) (UBDC)
- ESRC [Understanding Society – the UK Household Longitudinal Study](#) (UKHLS)
- ESRC [UK Data Service](#) (UKDS)
- ESRC [International Social Survey Programme](#) (ISSP)
- ESRC [European Social Survey](#) (ESS) (ESS ERIC)
- ESRC [Consumer Data Research Centre](#) (CDRC)

In addition, there are surveys run that combine both government and philanthropic funding to support the long-running collection of data, such as the British Social Attitudes Survey UK ([UK Data Service, 2023](#)).

Survey data sets that are linked to specific academic research projects are also important. The topical focus of these can be very broad. For example, there is work focusing on wellbeing; resilience; opinions, attitudes values towards conservation as a whole (i.e. future of conservation survey); beliefs about how conservation should be carried out; behaviours towards nature; aesthetics; governance processes (e.g. on finance, power and equity, and participation); practitioner perspectives on strategy; consequences of peoples relationship with nature; and different definitions of 'nature', to name but a few.

Polling companies

Polling companies such as YouGov also regularly collect data about people's attitudes and actions towards the environment. YouGov, for example, has several long-term 'trackers' that display data from surveys conducted at regular intervals that relate to the natural environment ([YouGov, 2023](#)).

Why academics and other sources collect survey data on people and nature relations

There is a wide array of reasons why academics and other sources might collect survey data on people's relationship with nature. These reasons include but are not limited to:

- advancing academic knowledge within diverse fields;
- 'pulse checking' rapid insights to a current issue;
- filling a specific gap in available data;
- contributing to social theory; research and development (R&D) for business;
- reaching new participants or stakeholders;
- helping to engage these external parties in decision-making; and
- providing thought leadership.

In contrast to the usual operation of governments and NGOs, the use of surveys by academics may simply be for the advancement of knowledge, rather than for specific policy or practical agendas.

Reporting and use of academic and other survey data sets

The reporting and use of survey data sets from academic and other actors are varied. Results from academic survey data are generally published in the academic literature. This may or may not be open access and may or may not include the publishing of underlying data sets (although this is increasingly now an expected good practice for publication). Other sources of research and polling data are generally available on dedicated websites. Anticipated users of these data sets include: other academics; NGOs; government and agencies; and the public. On occasion, survey data from academic and other sources is published in the popular press (and other media).

Appendix 1: Methods

We initially identified details about publicly available government-commissioned surveys on relations between people and nature in the UK using internet searches between May and July 2023 (using both Ecosia and Google), and following links in relevant websites. Search terms used for this initial search were:

- people and nature surveys UK / England / Northern Ireland / Scotland / Wales
- survey nature visits UK / England / Northern Ireland / Scotland / Wales
- national parks surveys UK / England / Northern Ireland / Scotland / Wales
- environment agency surveys UK
- water visitor survey sports UK / England / Northern Ireland / Scotland / Wales
- forest survey visitor UK / England / Northern Ireland / Scotland / Wales

This initial search strategy was complemented by direct emails to representatives at the four environmental agencies in England, Northern Ireland, Scotland, and Wales to check findings and to provide any additional details.

The initial search also provided results that could help to identify a range of examples of NGO-led surveys on relations between people and nature in the UK. This produced a non-exhaustive set of example surveys, which were able to provide some insights into the kinds of surveys that are conducted by NGOs. This initial search strategy was complemented by direct emails to representatives at several major environmental NGOs, including the National Trust, the Rivers and Canals Trust, the Royal Society for the Protection of Birds, the Wildlife Trusts, the Woodland Trust, and WWF UK, who were asked to provide any additional details of relevant surveys.

For each survey identified, we recorded details of the surveys of: Institution; Jurisdiction; Country; Title of survey; Subsection; Topics covered; Years available; Sample size; Website; Dataset availability. Not all this information was available for every survey.

Note on the limitations of the scope of this study

Although the focus of this scoping study has been specifically on social surveys, this method is just one of many ways in which the relationship between people and nature can be understood, measured, and evaluated. There are a wide range of other sources of data that may usefully inform our understanding, and which can also be paired with surveys. Other methods might include interviews, ethnographic methods, social media scraping, as well as other visitor numbers using vehicle counters in public parks,¹ the number of receipts in public forests,² or data collected through estimated visitor numbers based on attraction reporting.³ There are opportunities to combine these forms of data collection with surveys in order to triangulate or contextualise results.

1 For example, [DAERA in Northern Ireland](#) estimates the number of visitors to country parks based on monthly calibrated estimates of visitor numbers using vehicle counters.

2 Data is also available on day visits to NI Forest Service sites based on data collected from admission charges. This data is made available by the [Forest Service in their annual reports](#): and also reported in statistics by Forest Research UK.

3 Visit Britain carries out a [visitor attraction survey](#), which asks attractions to report on the number of visitors that they receive.

Appendix 2: Collation of publicly-available and government-commissioned surveys on people and nature relations

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Natural England	England	People and Nature Survey	The number and types of visits people make to the outdoors; what benefits people feel they get from visiting the outdoors; people's perceptions of National Parks, national and local landscapes, and the provision of woodland and other types of greenspaces for recreation.	This data contributes to Natural England's delivery of statutory duties, informs Defra policy and natural capital accounting, and contributes to the outcome indicator framework for the 25 Year Environment Plan.	2021; 2022; 2023	25,000 (2022)	People & nature data viewer	People & nature survey for England
Natural England	England	Monitor of the Engagement with the Natural Environment	Visits made to green and natural spaces, including frequency, motivations, and barriers to visiting and activities undertaken.	Provides trend data for how people experience the natural environment in England.	2009 to 2019	47,580 (2019)	Monitor of engagement with the natural environment 2009-19	Monitor of engagement with natural environment survey purpose & results

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Department for Culture, Media and Sport	England	Participation survey	Frequency of participation, reasons for participating, barriers to participation and attitudes to the sectors. Visits to heritage sites (including countryside sites etc).	Provide a central, reliable evidence source that can be used to analyse cultural, digital, and sporting engagement, providing a clear picture of why people do or do not engage; meet the needs and interests of everyone who uses Taking Part data; underpin further research on driving engagement and the value and benefits of engagement.	2021 to 2027	33,000 (2022)	Participation survey statistical releases	Participation survey
Office for National Statistics (commissioned by DEFRA and others)	England	Opinions and Lifestyle Survey (OPN)	Feelings towards the environment; Worry about climate change; Anxiety about the environment; Changes to lifestyle to help tackle climate change.	Data from the Opinions and Lifestyle Survey (OPN), about public attitudes towards the future of the environment and the impact of climate change.	1990 to 2023	2,000-2,500 (2023)	Opinions and lifestyle survey	Opinions and lifestyle survey QMI
Department for the Environment, Food and Rural Affairs (Defra)	England	Survey on Attitudes to the Environment	Public's awareness, attitudes, and behaviours towards the environment.	To support Defra in several key policy areas, through providing data on public attitudes and behaviours	2020 to 2023	9,325 (2022)	In report	Survey on attitudes to the environment - NT0821

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Forest Research (for Forestry Commission, Forestry England, and Defra)	England	Public Opinion of Forestry Survey	woodland recreation; engagement with forests and woodlands; importance of forests and woodlands; attitudes to forests and woodlands during coronavirus pandemic; climate change; and tree health.	"These surveys are used to inform and monitor policy development."	2003; 2005; 2007; 2009; 2011; 2013; 2015; 2017; 2019; 2021	4,304 (2021)	Statistics by topic public opinion of forestry	Public opinion of forestry
Northern Ireland Statistics and Research Agency	Northern Ireland	Continuous Household Survey (CHS)	Levels of concern for environment, Environmental problems considered most important; Actions taken that have a positive impact on the environment.	Reported by Dept of Agriculture, Environment and Rural Affairs in annual environmental statistics reports	Annual	9,000 (2022)	UK Data Service	Continuous household survey
Dept of Agriculture, Environment and Rural Affairs	Northern Ireland	Northern Ireland Forests Visitor Survey 2019	Number of visits to forests; amount spent; profile of visitors; activities during visits.		2014; 2019	1,441 (2019)	In report	NI forests visitor survey 2019

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Outdoor Recreation Northern Ireland	Northern Ireland	People in the Outdoors Monitor for Northern Ireland	How people in Northern Ireland engage with the natural environment, the benefits they gain from it, and the barriers they face trying to access it.	Funded by the Department of Agriculture, Environment and Rural Affairs (DAERA) and Sport Northern Ireland to support the work of the cross-government Strategic Outdoor Recreation Group (SORG).	2020 to 2021	6,048 (2021)	POMNI	POMNI
Forest Research	Northern Ireland	Public Opinion of Forestry Survey	Woodland recreation; engagement with forests and woodlands; importance of forests and woodlands.	"These surveys are used to inform and monitor policy development."	2005; 2007; 2010; 2014; 2019; 2023	1,000 (2023)	Statistics by topic public opinion of forestry	Public opinion of forestry
NatureScot / 56 Degree Insight / Kantar	Scotland	Scotland's People and Nature Survey			2013 to 2014, 2017 to 2018, 2019 to 2020	11,100 (2020)	In report	Scotland's people and nature survey 2019 to 2020 outdoor recreation health
Scottish Government	Scotland	Scottish Recreation Survey	Visits to the outdoors.		2003 to 2012	-	-	N/A

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Scottish Government / Ipsos MORI	Scotland	Scottish Household Survey (SHS)	Visits to the outdoors.		2013 to 2022	4,576 (2020)	Data explorer	UK Data Service Scottish household survey
NatureScot	Scotland	Scottish Nature Omnibus Survey	awareness, knowledge of and opinions on biodiversity, landscapes, and nature protection.	To help NatureScot evaluate the impact of our public-facing communications. It explores the general public's views on a range of issues including wildlife, biodiversity loss, National Nature Reserves, Marine Protected Areas, Countryside Rangers and taking positive action for nature.	2009; 2015; 2017; 2019	1,101 (2019)	In report	Scottish nature omnibus 2019
Forest Research (commissioned by Scottish Forestry)	Scotland	Public Opinion of Forestry Survey	woodland recreation; engagement with forests and woodlands; importance of forests and woodlands.	"These surveys are used to inform and monitor policy development."	2013; 2015; 2017; 2021	1,000 (2021)	Statistics by topic public opinion of forestry	Public opinion of forestry

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Welsh Government	Wales	National Survey for Wales	Overall levels of participation in informal outdoor recreation; places visited on land and water; types of activities; levels of physical activity; economic expenditure; motivations for using the outdoors; barriers to visiting the outdoors Whether change in biodiversity has been perceived; whether further change is expected; level of concern about changes to biodiversity.	"The results are used by the Welsh Government to help make Wales a better place to live."	2012 to 2022	12,000 (2022)	National survey Wales results viewer National survey Wales	
Natural England / Kantar	Wales	People and Nature Survey Wales			NEW	-	-	-
Forest Research	Wales	Public Opinion of Forestry Survey	woodland recreation; engagement with forests and woodlands; importance of forests and woodlands.	"These surveys are used to inform and monitor policy development."	2013; 2015; 2017; 2019; 2021	1,014 (2021)	Statistics by topic public opinion of forestry	Public opinion of forestry

Institution	Jurisdiction	Title of survey	Summary of metrics	Stated justification / objective	Years available	Sample size (in most recent survey)	Data set available?	Website
Visit England, Visit Scotland, Visit Wales	England, Scotland Wales, NI	Great Britain Day Visits Survey		A national consumer survey of day visits to tourist sites in the UK	2011 to 2019	29,226 (2021)	In report	GB day visits survey archive
Visit England, Visit Scotland, Visit Wales	England, Scotland Wales, NI	Great Britain Tourism Survey		A national consumer survey measuring the volume and value of domestic overnight tourism trips taken by residents in Great Britain, and provides detailed information about trip and visitor characteristics.	2010 to 2019	2,000 (2019)	In report	Great Britain tourism survey

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Leverhulme Centre for Nature Recovery



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About LCNR


The ongoing loss and degradation of nature is one of the greatest challenges of our time. To halt and reverse this global biodiversity decline, the Leverhulme Centre for Nature Recovery was created as a hub for innovative research on nature recovery nationally and worldwide. It brings together experts from disciplines across the University of Oxford, including geography, ecology, social science, finance, economics, psychiatry, anthropology, artificial intelligence, statistics and earth observation. Our team collaborates on a range of projects, working with national and international partners.


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