



Noticing Nature

The first report in the Everyone Needs Nature series



#EveryoneNeedsNature

Introduction





About this research

A growing body of evidence points to the positive impacts of nature for people. Yet, while evidence is growing rapidly, this is prompting new questions about the essential ingredients of a positive and sustainable relationship with nature for individuals.

Working in partnership with Professor Miles Richardson and his team of researchers at University of Derby's Nature Connectedness Research Group, we therefore designed a programme of research with both children and adults, to enrich understanding of:

- the different factors that are associated with children and adults proactively doing things to help nature and wildlife, making use of newly established measures of 'pro-nature conservation' behaviours;
- the significance of people's participation in simple, everyday acts of 'tuning in', noticing or paying attention to nature, relative to other previously explored factors such as time spent outdoors;
- how these and other aspects in people's relationship with nature are associated with higher or lower levels of wellbeing; and
- the personal benefits that people report from being prompted to 'take notice' or do things to help nature on a daily basis.

This report:

- provides an overview of our main findings, including deeper analysis by University of Derby of data from wide-ranging national surveys we undertook with children and adults. Fieldwork for these surveys was conducted on our behalf by YouGov;
- shares further insight from a qualitative study conducted for us by ResearchBods, which builds on recent research by Professor Richardson and his team.



Why do some people take action to help nature? And why do others not?

For a long time, this has been talked about in terms of education. You need to teach children biology so they can appreciate the natural world. It's a question of scientific understanding.

Others have argued that it's about spending time in the great outdoors. Explore the Amazon. Climb a mountain. Get out there and *see the world*.

But what if it's simpler than that? What if the little things make the biggest difference?

Listening to birdsong. Looking at the stars. These are things humans have been doing since the dawn of time.

What if the biggest blocker between us and saving the planet (and ourselves) is the fact that we've stopped noticing nature?

For many people, nature is not an integral part of their life

This report reveals that just 19% of children regularly notice wildlife. In the past year 57% of adults rarely or never watched the sunrise. Only 27% frequently watched clouds.

Yet these activities are free. They make us feel good. And they can be done close to home.

According to our research, such moments are a defining factor when it comes to taking pro-nature conservation action.

Noticing nature in small, everyday ways could lead to radical results

We've found that 'noticing nature' and 'nature connectedness' are strongly linked to people taking conservation action.

The influence of these factors is far greater than the influence of 'time spent outdoors' or 'knowledge and study of nature'.

People taking conservation action are more likely to be 'noticing nature' than they are to be studying it. They're not necessarily going on big outdoor adventures, but they are enjoying simple moments with the natural world.



Connecting with nature on a regular basis enhances wellbeing

This report also uncovers a powerful link between nature and both happiness and feeling life is worthwhile. In addition to having control over their life, we found that ‘nature connectedness’ and ‘noticing nature’ had a significant impact on people’s wellbeing.

In many ways, this is a hopeful report

The public are concerned about nature and they want institutions to act

It’s clear that there’s more we can do as individuals. But it’s possible that the first step on that journey is tuning into the world around us.

We need to connect with nature on a daily basis. We need to notice birds, stars and wild flowers. It’s a radical, but straightforward proposition. And, in many ways, it’s not a new one.

This year marks the National Trust’s 125th anniversary

The National Trust was established in 1895 because our founders believed in the importance of making nature, beauty and history available to ordinary people.

As part of the anniversary celebrations, we’ve announced three new ambitions:

- We’ll be carbon neutral by 2030
- We’ll plant 20 million trees in 10 years
- We’ll create green corridors for people and nature

We will also encourage people to connect with nature in simple ways. You can read more about our **Noticing Nature action plan** at the end of this report.

‘We all want quiet. We all want beauty
... We all need space. Unless we have it,
we cannot reach that sense of quiet in
which whispers of better things come
to us gently.’

Octavia Hill, 1883
Co-founder of the National Trust



Contents and research headlines



Contents and research headlines

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Factors linked to wellbeing

Page 32

- ‘Nature connectedness’ and ‘noticing nature’ are strongly associated with happiness and the feeling that life is worthwhile
- In addition to having control over their life, we found that ‘nature connectedness’ and ‘noticing nature’ had a significant impact on people’s wellbeing

Factors linked to physical and mental health

Page 37

- On average, the most nature-connected adults have self-reported health scores that are 9% higher than the rest of the population
- ‘Nature connectedness’ is associated with lower levels of depression and anxiety

The Noticing Nature challenge

Page 39

- Participants completed one ‘noticing nature’ activity every day for a week
- After completing this challenge, participants felt freer, more mindful, closer to loved ones and they experienced higher levels of self-esteem

How often people ‘notice nature’

Page 45

- Although simple engagements with nature are strongly linked to conservation action and personal wellbeing, they are infrequent parts of most people’s lives



Contents and research headlines

Noticing Nature action plan

Page 48

- Promote everyday access to simple moments in nature
- Establish a UK-wide measure and target for ‘nature connectedness’
- Encourage action across society, from politicians to individual citizens

Appendix

Context of our research

Page 53

- Explains the need to better understand the factors driving conservation action and the links between nature and wellbeing

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How this report was created



National survey

We surveyed nationally representative samples of 2,096 adults aged 16+ (in England, Wales and Northern Ireland) and 1,051 children (in Great Britain) aged between 8 and 15.

This is the first population-wide survey of its kind to focus on pro-nature conservation action, such as providing food for wildlife – rather than pro-nature environmental action, such as cutting back on air travel.

The survey explores attitudes to nature, participation in nature activities, participation in pro-nature conservation action and self-reported wellbeing. It looks at relationships between these factors and ‘nature connectedness’. ‘Nature connectedness’ is an internationally accepted psychological construct that describes the closeness of an individual’s relationship with nature.

The survey design and data analysis were undertaken by the National Trust’s audience research team in collaboration with the *University of Derby Nature Connectedness Research Group*. The survey was conducted by YouGov.

The children’s survey took place on 19–24 July 2019.
The adults’ survey took place on 29–30 July 2019.

The Noticing Nature challenge

We recruited 283 adults to *The Noticing Nature challenge*. This included a mix of the general population, National Trust members and National Trust volunteers.

Participants were given a programme of simple ‘noticing nature’ activities. The activities were informed by the University of Derby’s work on noticing the good things in nature.

We measured the impact these activities had on individuals, using an online tool where participants kept a diary. This research was undertaken by ResearchBods, a specialist in research with online communities.

Existing evidence

Our research builds upon existing evidence about people’s relationship with the natural world.
Please see the appendix for further information.

Defining 'nature connectedness'

We measured 'nature connectedness' with a question based on Wesley Shultz's *Inclusion of Nature in Self Scale*. We used the same question for adults and children:

Q. Please select the picture below which BEST describes your relationship with nature.

The first picture shows you and nature being far away from each other and the last picture shows you and nature being close to each other. Imagining one of the circles is you and the other is nature, how interconnected are you with nature right now?

Self Nature



Self Nature



Self Nature



Self Nature



Self Nature



Self Nature



Findings





Concern for nature

There are very high levels of concern about the state of nature

Around three quarters (73%) of children and four out of five adults (81%) say they are concerned about a decline in wildlife in the UK. [\(Figure 3\)](#)

Our research also indicates that levels of concern could be growing

More than half of children (55%) and just under half of adults (49%) say they are more concerned about nature and wildlife than they were a year ago. [\(Figure 4\)](#)

Amongst adults, we find that increased concern is highest among younger age groups, with 56% of those aged 16–24 agreeing that they are more concerned than they were a year ago.

Many adults have noticed a decline in wildlife

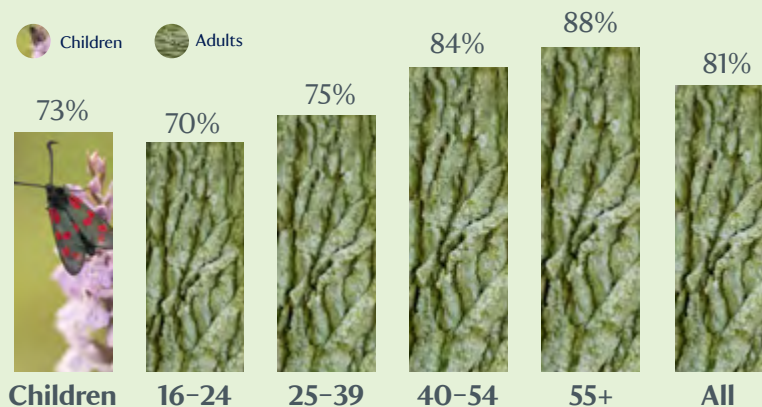
Just over half of adults (52%) agree that they ‘have personally noticed a reduction in UK wildlife in their lifetime’. This is highest amongst those aged 55+. 60% of this group agree that they have personally seen a reduction in their lifetime.

Figure 3 Variations in concern for decline in wildlife

- Amongst adults, concern about the decline in wildlife becomes more prevalent with age. Seven in 10 (70%) of 16–24 year olds are concerned compared with nearly 9 in 10 (88%) of those aged 55+.
- Having access to green space over which you have some ‘ownership’ is linked to higher concern. Adults or children, with access to their own garden or other green space they help care for, are more likely to be concerned about the decline in nature than those without access.
- Concern varies by the type of area people live in. Adults and children living in rural areas are more likely to be concerned than those living in urban areas.

% of people concerned – by age

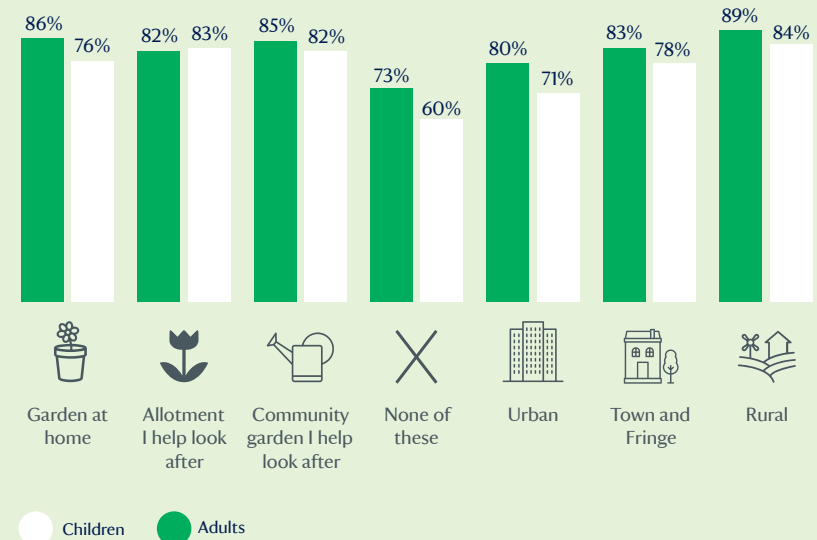
Q. How much do you agree or disagree with this sentence?
I am concerned about the decline in wildlife (such as birds, animals, insects). *Net concerned*



% children and adults concerned – by green space access/area they live in

Q. **Adults:** How concerned or unconcerned are you about the decline in wildlife in the UK (such as birds, animals, insects)? – *Net concerned*

Q. **Children:** How much do you agree or disagree with this sentence? **I am concerned about the decline in wildlife** (such as birds, animals, insects). *Net agree*



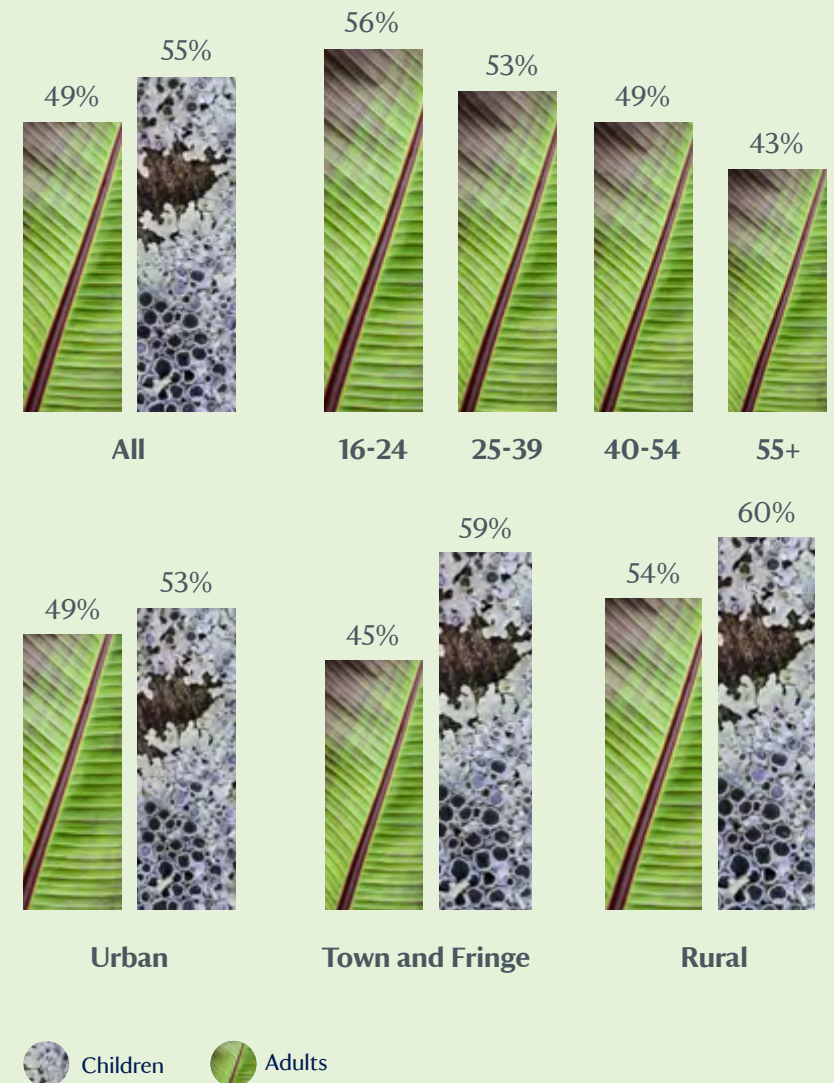
Unweighted base: All GB children 8-15 (1051); All UK adults 16+ (2096). Source: YouGov for National Trust

Figure 4 Increased concern about nature and wildlife compared to a year ago

- We see the greatest signs of a growing concern about nature and wildlife amongst children and younger adults; 55% of children and 56% of adults aged 16–24 say they are more concerned than a year ago, compared to 43% of those aged 55+.
- Adults living in Rural (60%) or Town & Fringe (59%) areas are also more likely to say that they are more concerned about nature and wildlife than a year ago than those living in Urban areas (53%). For children it is those in Rural areas that are most likely to have become more concerned than a year ago, compared to those in Urban or Town and Fringe areas.

% who are more concerned than a year ago – by age and type of area they live in

Q. Do you agree with the statement ‘I am more concerned about nature and wildlife than I was a year ago’? *Net agreement*



Unweighted base: All GB children 8-15 (1051); All UK adults 16+ (2096). Source: YouGov for National Trust

Looking
to our
future





Looking to our future

There's widespread pessimism about the future of the UK's nature

Almost 7 in 10 (67%) adults believe the natural environment will be in a worse state in 20 years. [\(Figure 5\)](#)ⁱⁱⁱ

By comparison, only 1 in 10 (11%) see any prospect for improvement. Only 2% believe that the natural environment will be 'much better' in 20 years. A further 9% believe it will be 'slightly better'.

Our survey found several potential reasons for this pessimism

A large majority of people acknowledge that 'the balance of nature is very delicate and easy to upset' and feel that 'humans are severely abusing the planet'. [\(Figure 6\)](#)

Most adults disagreed with the statement that 'humans have the right to modify the natural environment to suit their needs'.

There's a strong desire to protect nature and scepticism about politicians' motivations

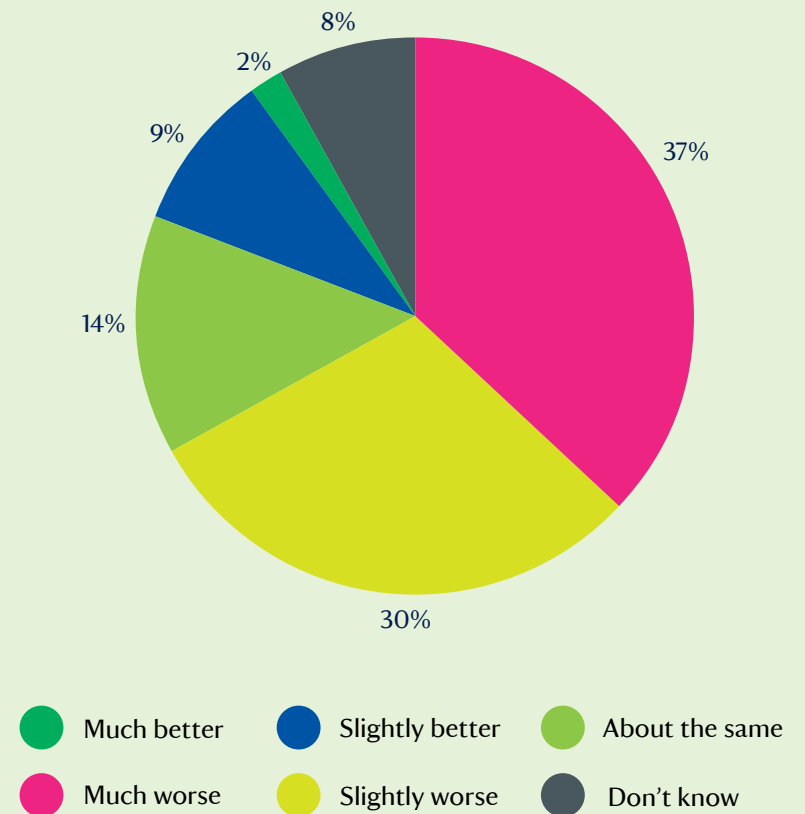
Almost everyone agrees that it's important that nature has strong protections. [\(Figure 6\)](#)

86% agree that 'it's important that there are strong laws to protect nature in the UK'. Meanwhile, 75% agree that 'I would be very concerned if Brexit reduced protection for nature in the UK'.

Figure 5 Pessimism for the future of the natural environment

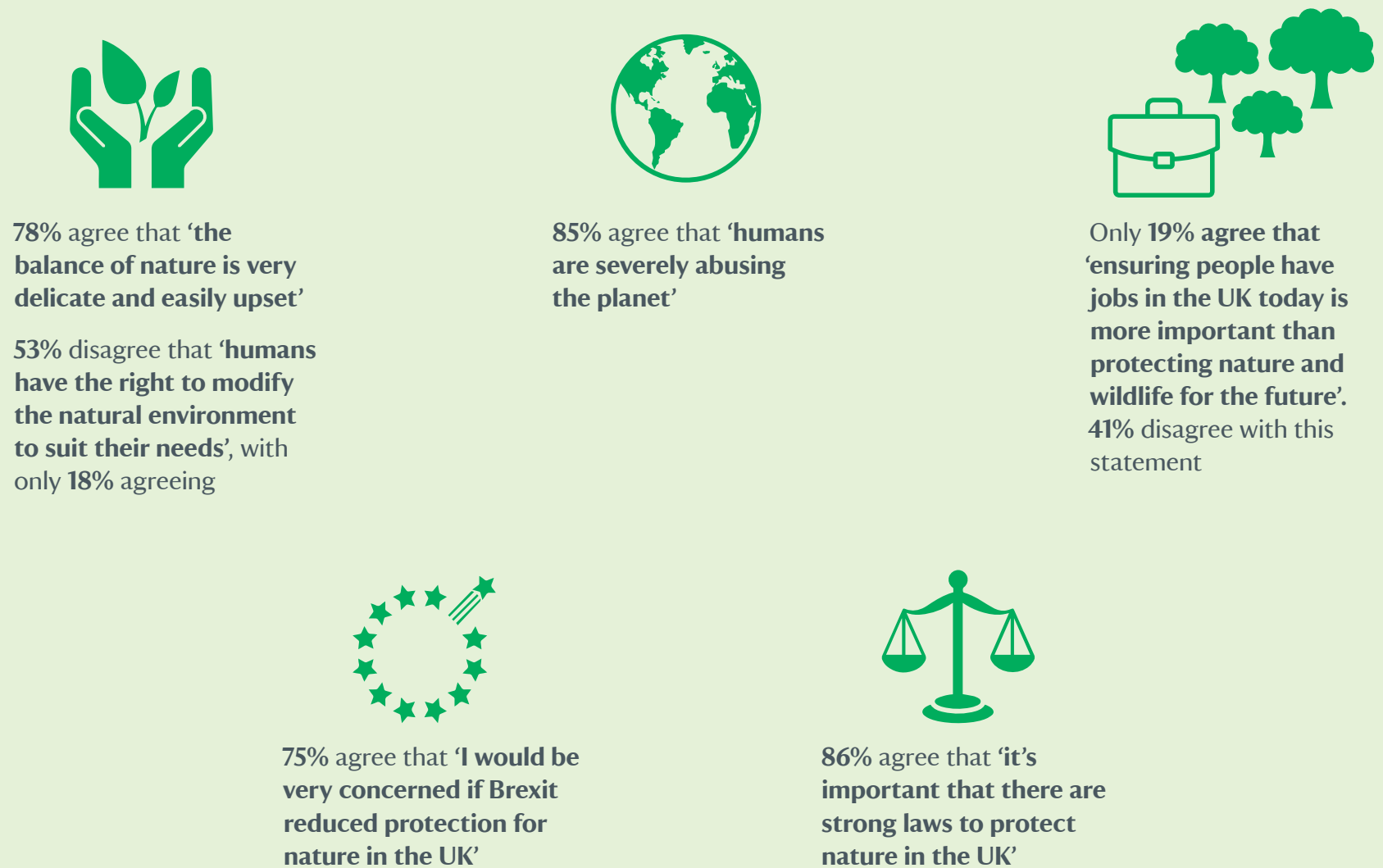
- Almost 4 in 10 are extremely pessimistic, saying that in 20 years' time nature and the natural environment will be 'much worse' for today's generation of children. Only 2 in 100 think it will be 'much better' in 20 years' time.
- The youngest adults in our sample are even more pessimistic with 45% of 16 to 24 year olds saying it will be 'much worse'.
- We also saw regional differences with nearly half (48%) of those living in the North East saying it will be 'much worse' while only 32% of those in London, Yorkshire and the Humber and Northern Ireland saying this.

Q. Thinking about today's generation of children (that is those up to 15 years old) as adults in 20 years' time ... in comparison to how it is today, how much better or worse do you think nature and the natural environment will be in the UK, or will it be about the same?



Unweighted base: All UK adults 16+ (2096). Source: YouGov for National Trust – Nature Survey (Adults aged 16+)

Figure 6 **Nature values and attitudes**



Unweighted base: All UK adults 16+ (2096). Source: YouGov for National Trust – Nature Survey (Adults aged 16+)

Organisational and government action





Few adults believe that organisations or influencers are doing enough to protect nature

The majority feel that politicians, house builders, construction companies and the big supermarkets 'could do more'. [\(Figure 7\)](#)

The same applies to energy companies, big technology companies (such as Apple and Google), local councils, local Members of Parliament (MPs), water companies and farmers.

There's no room for complacency amongst organisations directly working to help nature. Around one in three people believe that conservation organisations and environmental campaign groups 'could do more'.

Children have similarly high expectations

Half of children (50%) say that their parents or guardians 'could do more'. [\(Figure 7\)](#) Six in 10 (61%) say that their school 'could do more'. Four out of five (81%) agree that adults in general 'could do more'.

Figure 7: Doing enough to help and protect nature in the UK

Few adults think many organisations or individuals with influence are doing enough to protect nature. Around 4 in 5 people feel politicians in general, house builders, the big supermarkets, energy companies and big technology companies 'could do more'. Expectations for 'doing more' aren't far behind for local councils, local MPs and water companies. More than half (54%) also think farmers 'could do more', and a smaller but significant proportion of people believe that conservation organisations (38%) and environmental campaign groups (36%) 'could do more'.

Amongst children around 8 in 10 think that adults could be doing more, 6 in 10 that their school could be doing more, and ½ that their parent(s) or guardian(s) could be doing more.

Q. In general, do you think each of the following could do more to help and protect nature in the UK, or do you think they are doing enough?

Unweighted base: All GB children 8-15 (1051); All UK adults 16+ (2096)
Source: YouGov for National Trust



Children

Adults in general



My school



My parent(s) My guardian(s)



Adults

Politicians (excluding local MPs)



House building and construction companies



The big supermarkets (such as Asda, Sainsburys, Tesco)



Energy companies (for example EDF, British Gas)



Your local council



Technology companies (for example Apple, Google)



Water companies (such as Thames Water, Scottish Water)



Your local MP



Farmers



Conservation organisations (such as National Trust, RSPB)



Environmental campaign groups (for example Greenpeace, Friends of the Earth)



They could do more



They are doing enough



Don't know



Factors
linked to
individuals
taking action



The conservation actions examined in our survey included:

Amongst children:

- Making homes for nature (such as insects, hedgehogs)
- Growing flowers and/or plants that birds and insects will like
- Putting food out to feed garden birds
- Leaving an area of lawn/flowerbed to grow wild
- Taking part in a wildlife survey (such as Garden Bird Watch, BioBlitz)
- Talking to other people (such as family and friends) about the importance of looking after nature and the environment
- Picking up litter to help nature have a better home
- Avoiding disturbing wildlife when walking in nature by myself or with a dog

Amongst adults

- Making homes for wildlife
- Putting out food or water for wildlife
- Doing unpaid voluntary work outdoors
- Picking up litter when they see it

- Voting for parties or laws that are conservation, nature or wildlife friendly
- Getting in touch with Local Authorities about nature conservation issues

And amongst adults with access to a garden, allotment or community garden that they helped look after:

- Planting pollinator friendly plants (ones that are good for bees or other insects)
- Adding log piles or other materials that can be used as home/shelter for wildlife
- Maintaining plants with fruits or berries (for example, by not trimming them)
- Providing food for wild animals (such as birds, squirrels)

Very few activities are regularly done by the majority of people

For children there is only one activity in which more than half of children (55%) participated with any great frequency – ‘avoiding disturbing wildlife’. [\(Figure 8\)](#)

Likewise, there is only one activity – ‘putting food or water out for wildlife’ – that more than half of adults (55%) do with great frequency. [\(Figure 9\)](#)

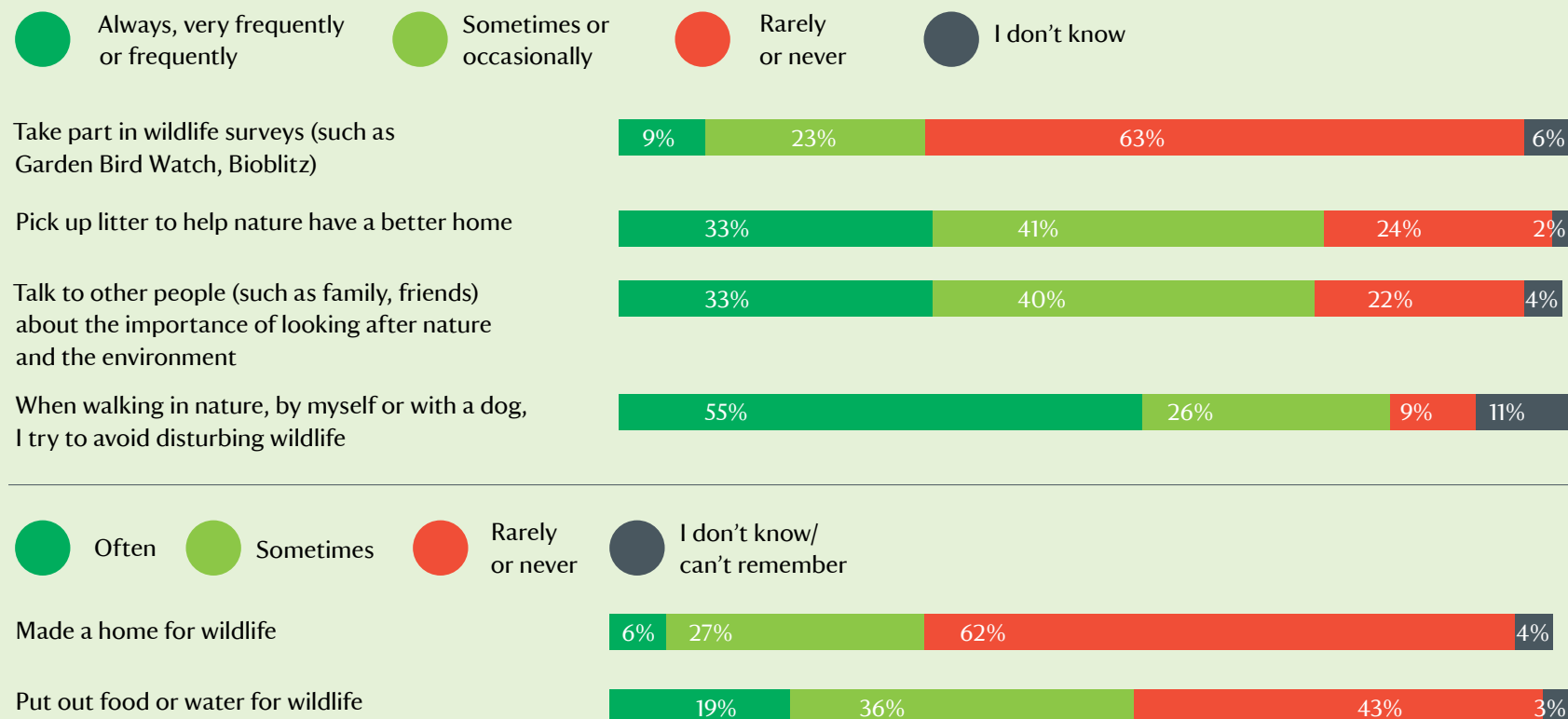
Figure 8

Pro-nature conservation behaviours in children

Q. How often, if at all, do you do the following? How often have you done each of the following in the past year?

We find variations in participation amongst children based on geography for some behaviours. For example, children living in *Town and Fringe* locations were the most likely to say they had ‘often or sometimes put food or water out for wildlife’ (62%). In comparison, children living in *Urban* or *Rural* areas were less likely to have done this (53% and 55% respectively). This translated into regional and national differences, with children in London less likely to have ‘often’ or ‘sometimes’ done this (49%) compared to children in Wales (64%) or Scotland (63%).

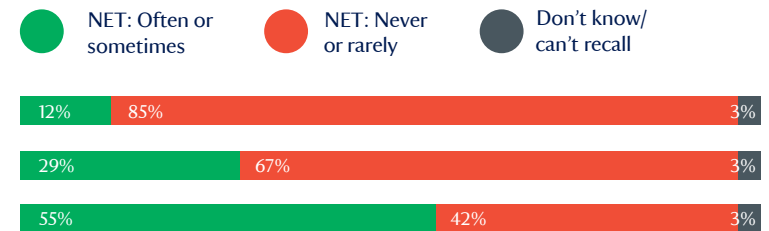
A similar pattern was seen in other activities by type of area they live in. Children in *Urban* areas were less likely to have ‘always’, ‘very frequently’ or ‘frequently’ picked up litter to help nature have a better home’ in comparison to *Rural* children (32% vs 41%).



Unweighted base: All UK adults 16+ (2096). Source: YouGov for National Trust – Nature Survey (Adults aged 16+)
 Unweighted base: All GB children aged 8 to 15 (1051). Source: YouGov for National Trust – Children & Nature Survey

Figure 9 **Pro-nature behaviours in adults**

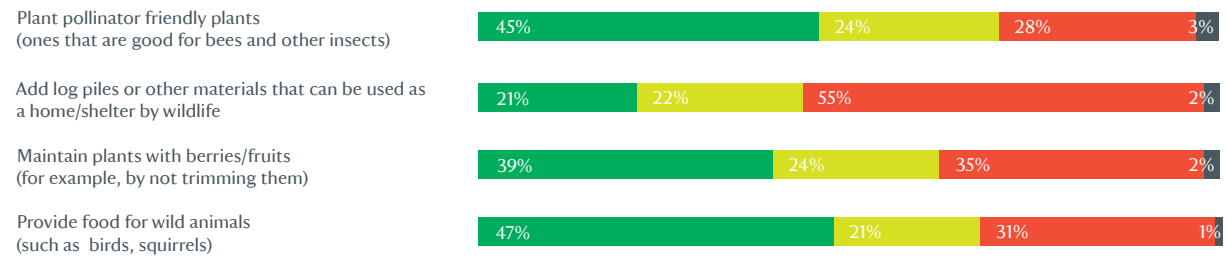
Q. How often have you done each of the following things in the past year?



Q. How often, if at all, do you do each of the following in your garden/allotment by yourself or with someone else?

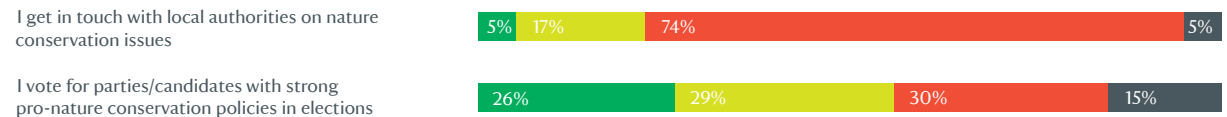


A. Pro-nature: actions in the garden



Q. How often, if at all, do you do each of the following?

B. Pro-nature: citizenship



Base: A. All UK adults 16+ (2096) with a garden, allotment or community garden (1,692). B: All UK adults aged 16+ (2096)

Source: YouGov for National Trust – Nature Survey (Adults aged 16+)



We explored how the following factors helped explain the variation in people's conservation actions:

- Demographics
- Nature connectedness (as defined on page 56)
- Time spent outdoors
- How likely they are to engage with nature through simple activities
- Indirect engagement with nature (for example watching or listening to nature programmes on radio or TV)
- Knowledge and study of nature
- Valuing and concern for nature
- Pro-nature environmental action (that is, actions linked to global, environmental concerns – rather than local, conservation concerns)

Some of these factors worked to explain 70% of the variation in people's pro-nature conservation behaviours.

'Noticing nature' has the greatest influence on conservation action.

We found that simple forms of engagement – everyday acts of paying attention to nature – were the most closely linked to conservation action.

In particular, we identified seven significant 'noticing nature' behaviours:

- Watching wildlife (for example bird watching)
- Listening to birdsong
- Smelling wild flowers
- Taking a photo/drawing or painting a picture of a natural views, plant, flower or animal
- Taking time to notice butterflies and/or bees
- Watching the sunrise
- Watching clouds

'Nature connectedness' was also a key factor in conservation action.

Reading and talking about nature, environmental behaviours, levels of concern, and knowledge of nature also helped explain conservation behaviours.



Spending time outdoors doesn't necessarily drive conservation action.

Surprisingly, 'time spent outdoors' does not appear to significantly increase the likelihood of an individual taking conservation action.

It's what you do with your time that makes the critical difference – rather than how much time you spend outdoors.

People who 'notice nature' are much more likely to do things to help nature.

People who 'always' or 'often' do the seven 'noticing nature' activities are much more likely to take conservation action than those who 'rarely' or 'never' do these activities. (Figure 10)

Figure 10

High and low 'noticing nature' groups and actions to help nature



Unweighted base: All UK adults 16+ (2096)
Source: YouGov for National Trust - Nature Survey (Adults aged 16+)

Factors linked to wellbeing





Our nature survey also explored the link between people's relationship with nature and their:

- self-reported happiness
- self-reported view on the extent to which they felt their life was worthwhile

For children we limited our research to their self-reported happiness.

Adults with a strong connection to nature are happier

'Nature connectedness' was a significant predictor of 'life being worthwhile' and of happiness – a link stronger than established factors, such as age and marital status.

Adults who were the most nature connected (the top 25%) scored an average of 19% higher than the rest of the population, when it came to feeling that the things they do in their life were worthwhile. They also scored an average of being happier by 15%.

Smelling wild flowers is strongly linked to wellbeing in adults.

The simple activity of smelling wild flowers emerged as a significant predictor of feeling happy and feeling that life is 'worthwhile'. (Figure 11)

Figure 11

Link between smelling wild flowers and levels of happiness or life being worthwhile

We see a relationship between ‘noticing nature’ activities and levels of happiness and feeling that life is worthwhile. We see this clearly for example in relation to the % who have ‘often’ or ‘sometimes’ smelt wild flowers in the past year. Those with the highest happiness levels and the highest sense of life being worthwhile, are much more likely to have participated ‘often’ or ‘sometimes’ in this activity.

% who have often or sometimes smelt wild flowers in past year

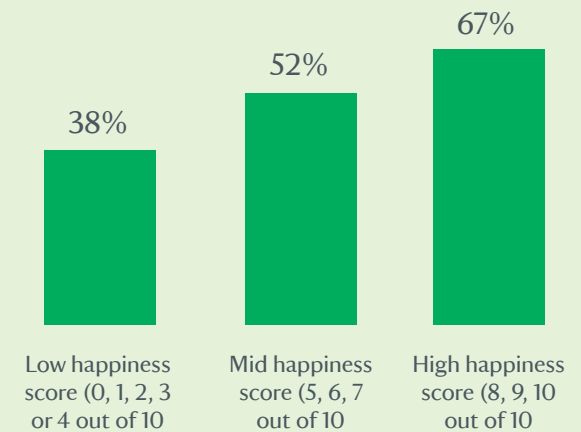
– comparing respondents by their score on ‘*feeling that the things you do in your life are worthwhile*’ and by score on ‘*in general, do you feel happy*’?



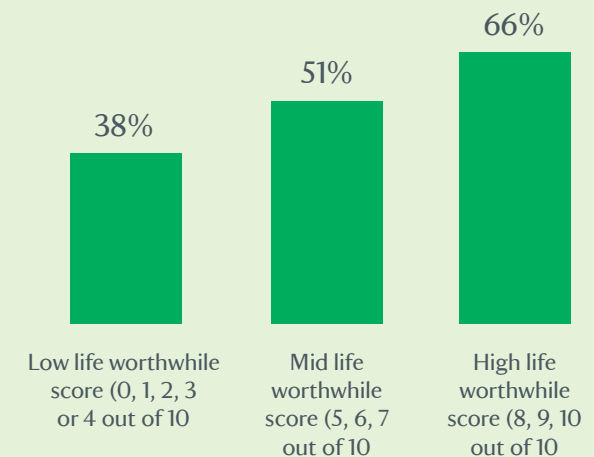
Source: YouGov for National Trust – Nature Survey (Adults aged 16+)



% by happiness level



% by life feeling worthwhile





Relaxing in a garden, watching wildlife, and noticing and celebrating nature were also significant predictors of life being worthwhile. However, they were smaller predictors than 'nature connectedness'.

Hillwalking, relaxing in the garden, noticing and talking about nature, were significant predictors of happiness. Again, they were smaller predictors than 'nature connectedness'.

Adults who scored highly on life feeling 'worthwhile'

We identified two groups in our adult sample with very high or very low scores for life being 'worthwhile'. We found that the 'high worthwhile' group are more likely to ...

Have frequently participated in 'noticing nature' activities



- 76% of the 'high worthwhile' group often or sometimes listen to birdsong
- 83% of the 'high worthwhile' group often or sometimes take time to notice butterflies and/or bees
- By comparison, 60% of the 'low worthwhile' group often or sometimes listen to birdsong or take time to notice butterflies and/or bees

Choose to spend time in nature to make themselves happy



- 78% of the 'high worthwhile' group does this often or sometimes
- This compared to 58% of the 'low worthwhile' group

Visit a local park or other nearby green space



- 53% of the 'high worthwhile' group say they often did this in the past year
- This compared to only 29% of the 'low worthwhile' group

Spend regular time outdoors



- 60% of the 'high worthwhile' group spend more than one hour outdoors on four or more days of a typical week
- By comparison, only 13% of the 'low worthwhile' group did the same



‘Nature connectedness’ sits alongside feeling in control of your life in contributing to wellbeing

- We also measured the extent to which adults believed they could control their life, which we labelled ‘self determination’.
- In addition to having control over their life, we found that ‘nature connectedness’ and ‘noticing nature’ had a significant impact on people’s wellbeing.

Children with a strong connection to nature are happier

Children were more likely to report feeling happy if they:

- had a higher level of ‘nature connectedness’
- engaged in meaning-based activities linked to nature (writing songs or poetry about nature and celebrating natural events)
- relaxed in nature (for example sitting and relaxing in a garden)

Children were less likely to report feeling happy if they:

- avoided nature (spent time indoors)
- showed annoyance linked to nature (for example, complained about pigeons, seagulls or wasps)
- were less connected to nature than one year ago

A family of six is hiking through a forest. The forest floor is covered in green bushes and numerous purple flowers. Tall, thin trees line the path, and sunlight filters through the canopy. A man in a blue shirt and khaki pants is walking towards the left. A woman in a bright green jacket is carrying a young child on her back. Other children are scattered around, some reaching for the flowers. The text "Factors linked to physical and mental health" is overlaid on the right side of the image in a white serif font.

Factors
linked
to physical
and mental
health



Our surveys examined the link between people's relationship with nature and their:

- self-reported health
- self-reported ill-being (depression and anxiety)

Adults with a strong connection to nature feel healthier

'Nature connectedness' was a significant predictor of health – to similar levels of established benchmarks such as being married.

We found that the most 'nature connected' (the top 25%) had mean scores for general health that were 9% higher than the rest of the adult population.

Certain outdoor activities are also predictors of health

Hillwalking, walking in the park, relaxing in a garden and outdoor voluntary work, were significant predictors of health.

However, all of the above were smaller predictors than 'nature connectedness'.

There's a link between 'nature connectedness' and mental health

'Nature connectedness' is strongly linked to lower levels of depression and anxiety. This is still the case when you take self-determination into account.

Importantly, the amount of time people spent in nature did not emerge as a significant predictor of feeling that life is worthwhile.

Eco-anxiety also emerged as a trend

We found that being concerned about the decline of nature was associated with lower levels of life feeling 'worthwhile'.

This suggests that, for some adults, heightened concerns around nature loss might have implications on their wellbeing.

Children with a strong connection to nature feel healthier

Children were *more likely* to report that they were healthy if they:

- had higher levels of 'nature connectedness'
- engaged in emotion-based nature activities (for example watching animals play or going out in nature to feel happy)
- engaged in knowledge-based nature activities (reading a book to learn more about wildlife or using binoculars or a microscope to study nature)

Children were less likely to feel healthy if they felt less connected to nature than a year ago.



Noticing
Nature
challenge



To further understand the specific benefits that people experience when ‘noticing’ or doing positive things for nature, we undertook a further study.

We recruited 283 adults – including a mix of the general population, National Trust members and National Trust volunteers.

Participants were asked to choose and complete one activity from a list of 15. They did this every day for one week.

We designed and selected the list of activities using the Pathways to Nature Connection model, providing three activity options to choose from for each pathway. (Figure 12)

Participants recorded their experience each day via an online community platform.

Figure 12

Participants could choose from 15 activities

1. Watch wildlife

Take some time to discover wild animals or insects near to where you live. Watch out for birds overhead, insects around flowers or hedgerows, or water wildlife in rivers/ponds.



Senses

2. Go barefoot

Head outdoors, take your shoes and socks off and spend some time feeling grass, sand or mud between your toes.

3. The sky's the limit

Either get up early to watch a sunrise or stay up late to admire the moon and spot stars and planets in the sky.

10. Where's wildlife?

Notice plants and animals on objects (such as furnishings or clothes) around you. From bumblebees on a t-shirt, to flowers on a mug or birds on curtains, keep your eyes peeled for nature symbols on items that surround you on a single day.

11. Let's talk about nature

Tell somebody what your favourite plant, flower or animal is and why. Then ask them what theirs is.



Meaning

12. Expand your nature knowledge

Read a book or article, or watch a video about nature/wildlife.



15. Nature notes

Write a poem about nature.

13. Capture nature's beauty

Take a photo or draw a picture of a natural view, flower or a wild animal.

Beauty

14. Get creative with wild art

Take your imagination outdoors to create a wild masterpiece. Explore an outdoor area near to where you live, collect several natural materials and then create a piece of art from whatever you find.

4. Take a break outdoors

Take a work meeting or a social catch up, which you would have typically done indoors, outside into a green space.

5. Get active in nature

Hold a yoga pose in nature for 10 seconds. If you usually visit the gym, swap it for a local park/green space and exercise outdoors. Or if you're brave enough, do a dance in a natural environment.



Emotion

6. Take some 'me' time in nature

Find a safe quiet spot outside, take a seat and close your eyes. Take three deep breaths, then listen for the natural sounds around you. How many different things can you hear?

7. Litter picking

Pick up litter in a green space/park local to where you live.



Compassion

8. Nourish nature

Put food out for wildlife or birds and then watch what arrives. Take a moment to think about how it feels to look after nature.

9. Go green-fingered

Plant something to grow in your garden or in a pot.

Figure 13

Noticing Nature Challenge participant benefit

There are four key benefits of being prompted to 'notice nature'.

The majority of participants reported some significant 'in the moment' outcomes, including simple enjoyment as well as other emotional, relationship and wellbeing benefits. (Figure 13)

These included feeling more mindful and able to slow down the pace of life, feeling liberated and free, feeling a sense of achievement or self-worth, and having experiences that brought a sense of togetherness and memories.

At the conclusion of the study 92% rated the activities they were prompted to do as enjoyable, and more than half said they would do something different as a consequence of taking part.

MINDFUL/The activities empowered participants to be more mindful, present in the moment, to slow down the pace of life a little



- They enjoyed and appreciated being able to step back from the daily rush of modern life
- They found this calming and relaxing, soothing and restorative, easing away tension
- It allowed people to centre themselves

TOGETHERNESS/Noticing nature brought about a sense of connection and togetherness, both with friends and family, and with the natural world around them



- They were able to create stronger bonds and more personal connections with loved ones
- They experienced meaningful moments and made new memories
- They got to know friends and family more intimately

LIBERATED/The activities were freeing and liberating, they enabled people to release the shackles of modern life



- They found this energising and invigorating

SELF-WORTH/We heard reports of activities creating an increased sense of self-worth and self-achievement



- People often taking brave steps outside of their comfort zone to participate
- Leaving them feeling accomplished and fulfilled

Figure 13

Participants gave wide-ranging feedback through their week. This provided richer qualitative insights on the personal impacts of the experience and also potential influence to notice or help nature more.

'Myself and a group of colleagues took our daily work meeting outside. We went to the local park where it was more informal than usual. The quieter members seemed more relaxed and were more vocal than usual. The weather was warm and sunny and I heard birdsong and children playing nearby'

Noticing Nature challenge participant reflects on taking a break outdoors



Participants feeling the textures of nature

'I took some time out of my day today to lay down in the garden, close my eyes, and just listen to the sounds I could hear. To start with I could just hear the background humming of cars going down a nearby road, and my neighbour's vacuum cleaner! After a few seconds, though, I began to hear birds chirruping and leaves rustling in the breeze. I certainly don't do this kind of activity enough, as it was very relaxing and peaceful'

Noticing Nature challenge participant reflects on taking some 'me time' in nature

Figure 13

Participants gave wide-ranging feedback through their week. This provided richer qualitative insights on the personal impacts of the experience and also potential influence to notice or help nature more.

'I loved doing things that were either different to what I'd normally do or doing things more often. I think doing something to do with nature every day really is what I enjoyed the most as it actually made me feel better – I felt relaxed and refreshed. I often don't stop all day, but this gave me cause to, and I feel I took time for myself but also for bonding with family. Doing some activities with my son helped us spend quality time together, and I actually learned something new about my husband whom I've known for seventeen years.'

Noticing Nature challenge participant reflecting on what they got out of the experience

'I'm going to try to set aside 15 minutes in the evening when dinner is cleared away to do similar activities rather than checking Facebook.'

Noticing Nature challenge participant reflects on taking some 'me time' in nature



Participants get creative with making wild art

How often
people 'notice
nature'



While our research suggests that simple 'noticing nature' activities are important, few are regularly participating in them

Children are not regularly participating in the most important 'noticing nature' activities

We looked at children's participation in the activities that are most closely linked to conservation action and improved wellbeing. In the past year:

- 90% infrequently or never watched the sunrise
- 83% either infrequently or never smelled wild flowers
- 79% either infrequently or never took photos/drew or painted a picture of a natural view, plant, flower or animal
- 77% either infrequently or never listened to birdsong
- 76% infrequently or never watched clouds
- 72% infrequently or never took time to notice butterflies and/or bees

In a typical week, 81% *didn't* watch wildlife (such as, birdwatching).

Children's participation was also low for the following activities:

- only 6% of children often make homes for wildlife
- only 7% of children often celebrate natural events (such as the longest day of the year, harvest)
- only 14% of children often grow fruit or veg
- only 14% of children often spend time in nature to make themselves happy
- only 18% of children often enjoy watching wildlife at play
- only 24% of children often stop to appreciate the stars or moon in the sky

Adults are not regularly 'noticing nature' either

The following activities are linked with conservation action and enhanced wellbeing. In the past year, of our adult participants:

- 57% rarely or never watched the sunrise
- 80% either infrequently or never took photos/drew or painted a picture of a natural view, plant, flower or animal
- 79% either infrequently or never smelled wild flowers
- 78% either infrequently or never watched wildlife (e.g. birdwatching etc.)
- 71% infrequently or never watched clouds
- 62% either infrequently or never listened to birdsong
- 62% infrequently or never took time to notice butterflies and/or bees

Adult participation was also low for the following activities:

- only 6% of adults often celebrate natural events (such as the longest day of the year, harvest)
- only 8% of adults often make homes for wildlife
- only 18% of adult often grow fruit or veg
- only 19% of adults often enjoy watching wildlife at play
- only 24% of adults often spend time in nature to make themselves happy
- only 27% of adults often watch clouds
- only 38% of adults often stop to appreciate the stars or the moon in the sky



Noticing Nature action plan





Summary of findings

There is strong public concern for nature. People believe organisations and politicians can do more. There are high levels of support for improved legal protections.

Simply tuning in and noticing the simple things in nature is a crucial step in developing a closer relationship with nature. And that closer relationship is critical to improving our own wellbeing, but also to saving nature and the environment

Yet participation in these simple activities is shockingly low and infrequent.

It's clear that a new relationship with nature is needed.

Proposed action plan

Unlocking the power of simple, everyday experiences in nature

1. Promoting activities that help people appreciate the simple pleasures of nature

Our research shows that a new relationship with nature can be created through programmes that encourage people to tune into nature on their doorstep. There are opportunities to do this with larger programmes or creative installations and prompts in public spaces. This approach should also be embedded across a range of sectors and public services – from education and health to placemaking and planning, as well as by organisations more directly involved in the care of nature.

As part of our 125th anniversary year the National Trust will:

- celebrate this milestone with a year-long campaign to connect people with nature
- with Derby University, share learning and case studies from our approach to designing nature-immersive visitor experiences at our places
- launch a '20 for 20' campaign which will provide prompts, hints and inspiration to help people find new ways to connect with everyday nature
- publish a new guide across the seasons with something to notice in nature in the UK for every day of the year.



2. Ensuring everyone is able to connect with nature on a local, daily basis

We need to rethink the broader role for spaces and networks of nature and their role in enriching people's experiences and opportunities with nature:

- ensuring local parks and green spaces survive, have the resources to flourish and offer the prompts and opportunities to pause and be closer to nature.
- improving the Green Belt and other green spaces immediately surrounding towns and cities so they are richer in nature and easier to access.
- developing new ways to provide access to tune into nature for everyone (including through programmes promoting access to Local Nature Reserves, Community Forests, National Nature Reserves, National Parks and Areas of Outstanding Beauty).
- connecting and bringing nature recovery networks into urban areas – an abundance and variety of wildlife gives people more to notice.

The National Trust will play its part:

- by 2030, we aim to establish 20 new green corridors – big, natural landscapes, close and connected to urban centres, offering nature for all to enjoy. We'll do this by building connections through estates we already look after near urban

places, exploring connections via rivers and canals, and working with partner organisations

- through our Future Parks Accelerator partnership programme with National Heritage Lottery Fund and local partners, explore new ways to fund and manage local parks sustainably to deliver public benefits, including connecting people with nature.

3. Establishing UK-wide targets for 'nature connectedness'

'Nature connectedness' provides an essential indicator of the health of our relationship with the natural world. But isn't at a level that is strong enough to secure it's future.

This is suggested by our data and supported by research that surveyed just under 4,000 people, aged 7 to 95 in England. This established a numerical measure scoring people's nature connectedness on a scale of 0-100, with 100 being the most connected and 0 the least . the average for England was 61.

As in our study, connections were found between high nature connectedness and conservation action. We estimate, based on the extent that people take action, that we need to raise the nation's level of nature connectedness to well above 70 to help deliver a sustainable future.



The National Trust will play its part:

- supporting and collaborating with government agencies and others in developing and promoting national measures of nature connectedness alongside other targets and indicators for nature.

Encouraging broader collective action across society in support of nature

4. Promoting strong legal protections

We need to defend and enhance the nature that we have. Our research supports the need to strengthen protections for nature and to drive its recovery – and do that in ways which brings nature into people's daily lives.

The National Trust will play its part:

- advocating for environmental and nature legislation and policy – in particular a world-leading Environment Act which will restore nature, and create new places for nature to thrive, so that people have more opportunities to experience/form a relationship with nature.

5. Doing more across society

The public believe that politicians, businesses and land managers (including farmers and conservation organisations like the National Trust) need to do more to support nature.

It's also clear that alongside environmental action, individuals can be encouraged to take conservation action and play their own part in helping nature.

The National Trust will play its part:

- inviting individuals, politicians and organisations to make their own public commitments for helping nature.
- working with politicians and others to get the right policies and laws in place.

Appendix





Context for our research

Nature contact and wellbeing

The relationship between nature and human wellbeing has been the subject of wide-ranging research. Evidence already points to the benefits of contact (that is, spending of time in nature), for example:

- Researchers using data from Measuring Engagement with the Natural Environment study in England has studied aspects of recreational time spent in natural environments and identified connections with health and wellbeing^{vi}.
- Researchers have also explored physiological responses to time spent in nature, for example looking at changes in stress biomarkers in saliva as an indicator of stress reduction in relation to short urban nature experiences^{vii}.

Nature connection and wellbeing

There is also growing evidence of the significance of nature-connectedness for different types of wellbeing.

A meta-analysis more on nature connectedness and eudaimonic wellbeing (that is, wellbeing associated with a person's sense of purpose and life having meaning) recently summarised evidence from reviewing existing research^{viii}. Similarly, a recent meta-analysis on hedonic well-being (that is, wellbeing associated with feeling happy) has found that people who are more connected to nature also tend to have higher levels of self-reported happiness^{ix}.

Conservation and pro-environmental action

Factors around pro-environmental actions (that is, behaviours linked to preventing climate change or wider environmental citizenship such as preventing pollution) have received significant attention in previous research.

Researchers from Simon Fraser University and Sheridan College, Canada have conducted an evidence review of the links between nature connectedness and environmental behaviours and for evidence for a causal relationship. A recent study of adults in England explored the links between exposure to nature (based on characteristics of neighbourhood greenspace, coastal proximity, and taking recreational nature visits) as well as appreciation of the natural world with self-reported pro-environmental actions. This research found a relationship between both recreational nature visits and nature appreciation and pro-environmental action, generally across the adult population as well as in different socio-demographic groups.

Other existing studies have started to examine the links between a range of factors in relation to pro-nature conservation behaviours (that is, actions directly to support or help nature):

- A door-to-door study of nearly 300 residents in three pairs of small and large urban areas in England found that people who visit green-space more regularly have higher biodiversity knowledge and support for conservation (measured using scales of pro-nature environmental behavior)^{xii}.



- *The Measuring Engagement with the Natural Environment (MENE)* study by Natural England – a very large sample survey, but which only covers England – includes measures of time spent in the natural environment alongside pro-climate, environment and nature attitudes and behaviours. Research through MENE to validate a new measure for nature connectedness was able to show, for the measure tested, that there were associated variations in various pro-environmental and pro-nature conservation behaviours for people with different levels of nature connectedness^{xiii}.

Nature connection as part of a sustainable and worthwhile life

Now, nature connectedness is emerging as a missing link in a sustainable and worthwhile life.

A study involving a nationally representative sample of 4,960 adults across England has found that nature connectedness is important, over and above nature contact, for wellbeing and pro-nature behaviours^{xiv}. After accounting for various types of nature exposure and a comprehensive range of socio-demographics (e.g. socio-economic status, neighbourhood deprivation, urbanicity, gender, ethnicity, employment, marital status) it found:

- A positive relationship between nature connectedness and feeling one's life is worthwhile – nearly 4 times larger than the increase associated with higher socio-economic status.

- A positive relationship between nature connectedness and household pro-environmental behaviours (for example, recycling, buying locally sourced food, eco-friendly products, walking or cycling).
- A positive relationship between nature connectedness and pro-nature conservation behaviours (such as, supporting nature conservation and volunteering)

The power of noticing good things in nature?

There is also a small but growing body of research which is starting to identify the benefits of noticing positive things in nature. Research by a contributor to this report explored the impact of 'noticing the good things in nature'. This study involved 582 participants including a control group. The group asked to notice the good things in nature showed sustained and significant increases in nature connectedness and clinically significant improvements in quality of life for those with living with a mental health difficulty – and bring significant benefits to all adults. This approach also helps to establish a causal relationship between improvements in nature connectedness and wellbeing.



Making new connections?

This study builds on existing research, through a large sample population scale survey across both adults and children. Alongside some of the elements explored through existing research, our study goes further to contextualise wellbeing and pro-nature behaviours against a wide range of factors. In particular this is the first UK-wide study to deploy a validated pro-nature conservation measure with adults and children at the same time as profiling participation in a range of simpler day-to-day acts of ‘noticing’ or paying regard to the natural world.

We have also been able to examine these elements against a range of other demographic, attitudinal and behavioural factors. Our ‘noticing nature challenge’ study also provides an insight on the self-reported that people get from engagement in a short experimental programme of daily activity which included activities involving both paying attention to nature and acting to help nature.



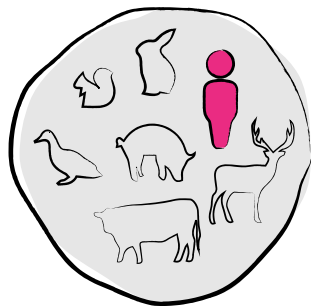
What is 'nature connectedness'?

A large body of research has long established that simple exposure to nature is good for us. Following on from research by others, such as Wesley Schultz, new studies, from Stephan Mayer and Cindy Frantz from Oberlin college, USA, dug deeper into defining and developing measures for an individual's connection to the natural world. This identified that 'nature connectedness' comprised three main aspects:

Cognition

How we think about nature

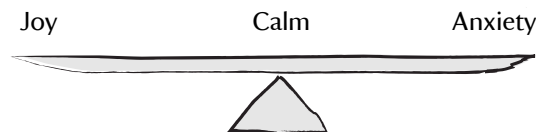
Nature connection is a cognitive belief about our place in the natural world. We have an evolutionary history and are part of a tree of life. We share a great deal with our distant cousins living on the other branches, rather than being humans sitting separately on top of a pyramid of life.



Emotions

How we feel about nature

Nature connection is about having an emotional affiliation with and response to nature. The benefits of a connection to nature can be explained by thinking about an 'emotional balance' between joy, calm and anxiety. Nature brings balance to our feeling – and that balance helps keep us well.

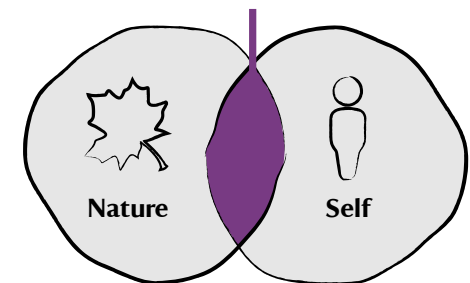


Self

How we relate about nature

Nature connection is when nature is part of you as a person. Some indigenous peoples have a view of self that extends into the natural world, so they don't live in a separate box labelled 'human'. Schultz's 'Inclusion of Nature in Self' scale uses two circles to represent 'self' and 'nature'; slide them over each other to measure your connection to nature.

Inclusion of nature in self





Acknowledgements and references



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- Dr. Holli-Anne Passmore, Researcher in Nature Connectedness

National Trust

- Alex Hunt, Head of Insight
- Rory Thomas, Insight Lead
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Notes and references

- ⁱ Lumber R, Richardson M, Sheffield D (2017) Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. *PLoS ONE* 12(5): e0177186. <https://doi.org/10.1371/journal.pone.0177186>
- ⁱⁱ Schultz. P.W. (2002). 'Inclusion with nature: The psychology of human-nature relations.' In *Psychology of sustainable development*. Edited by P. Schmuck and P.W Schultz, 61– 78. Boston, Dordrecht, London: Kluwer Academic Publishers
- ⁱⁱⁱ We measured this on a scale against the following statement: 'Thinking about today's generation of children (that is, those up to 15 years old) as adults in 20 years' time ... In comparison to how it is today, how much better or worse do you think nature and the natural environment will be in the UK, or will it be about the same?'
- ^{iv} Respondents rated whether they felt their life was worthwhile on a scale of 0 to 10, where 0 being "not at all worthwhile" and 10 being 'entirely worthwhile'. We defined the High Worthwhile Group as those scoring 9 or 10 out of 10. We defined the Low Worthwhile Group as those scoring 0, 1, 2 or 3 out of 10.
- ^v Richardson, M. Hunt, A. Hinds, J. Bragg, R. Fido, D. Petronzi, D. Barbett, L. Clitherow. T & White, M. (2019). 'A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights' in *Sustainability*, 11(12), 3250 <https://doi.org/10.3390/su11123250>. This study was funded by National Trust in partnership Natural England, Historic England, University of Derby, Royal Society for the Protection of Birds and The Wildlife Trusts.
- ^{vi} White, M.P., Alcock, I., Grellier, J. et al. Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Sci Rep* 9, 7730 (2019) doi:10.1038/s41598-019-44097-3
- ^{vii} Hunter M. R., Gillespie B. W. and Chen SY-P. (2019) Urban Nature Experiences Reduce Stress in the Context of Daily Life Based on Salivary Biomarkers. *Front. Psychol.* 10:722. doi: 10.3389/fpsyg.2019.00722
- ^{viii} Pritchard, A., Richardson, M., Sheffield, D. & McEwan, K. 2019. The Relationship Between Nature Connectedness and Eudaimonic Well-Being: A Meta-analysis. *The Journal of Happiness Studies* 2019
- ^{ix} Capaldi, C. A., Dopko, R. L., & Zelenski, J. M. (2014). The relationship between nature connectedness and happiness: A meta-analysis. *Frontiers in Psychology*, 5, 976.
- ^x Mackay, C. M. L., & Schmitt, M. T. (2019). Do people who feel connected to nature do more to protect it? A meta-analysis. *Journal of Environmental Psychology*, 65. doi:10.1016/j.jenvp.2019.10323
- ^{xi} Ian Alcock, Mathew P White, Sabine Pahl, Raquel Duarte-Davidson, Lora E Fleming. Associations between pro-environmental behaviour and neighbourhood nature, nature visit frequency and nature appreciation: Evidence from a nationally representative survey in England. *Environment International*, 2020; 136: 105441 DOI: 10.1016/j.envint.2019.105441

^{xii} Coldwell, D. F., & Evans, K. L. (2017). Contrasting effects of visiting urban green-space and the countryside on biodiversity knowledge and conservation support. *PLoS One*. doi:10.1371/journal.pone.014376

^{xiii} Richardson, M.; Hunt, A.; Hinds, J.; Bragg, R.; Fido, D.; Petronzi, D.; Barbett, L.; Clitherow, T.; White, M. (2019). A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights. *Sustainability* 2019, 11, 3250.

^{xiv} Martin, L., White, M. P., Hunt, A., Richardson, M., Pahl, S., & Burt, J. (2020). Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. *Journal of Environmental Psychology*, 101389.

^{xv} Miles Richardson & David Sheffield (2017) Three good things in nature: noticing nearby nature brings sustained increases in connection with nature / Tres cosas buenas de la naturaleza: prestar atención a la naturaleza cercana produce incrementos prolongados en conexión con la naturaleza, *Psycology*, 8:1, 1-32, DOI: 10.1080/21711976.2016.1267136

More recently this has also extended to exploring the role of a smartphone app as a means to prompt moments of urban nature connection: McEwan, K., Richardson, M., Sheffield, D., Ferguson, F. J., & Brindley, P. (2019). A smartphone app for improving mental health through connecting with urban nature. *International journal of environmental research and public health*, 16(18), 3373.

^{xvi} Mayer, S. F. & Frantz, C. M. (2004). 'The connectedness to nature scale: A measure of individuals' feeling in community with nature' in *Journal of Environmental Psychology* Volume 24, Issue 4, 503-515

Further information

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#EveryoneNeedsNature

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