7 Million Wonders
How natural history museums help people and nature flourish in the North West
People, nature, museums

How can natural history museums contribute to the happiness and fulfilment of people in the North West? How can they help protect nature for the future, both locally and worldwide?

Nature is often thought of in terms of animals, plants and wild places. Let’s take a broader view of nature, including our day-to-day surroundings and the way we experience them, the air we breathe and the natural resources we use.

People’s connection with nature touches on many agendas, including health and wellbeing, education, poverty, community cohesion, crime, town planning, transport, climate change and nature conservation.

Our natural history museums play an important role in connecting people and nature. This booklet explores how they do this, and how they could play an even stronger role that would benefit people, nature and wider society.

Key messages

There is clear evidence that contact with nature has positive effects on people’s physical and mental health, and at all stages of their lives: people need nature.

There is also plenty of evidence that nature is in decline. Animals, plants and wild places will rely on people caring about them for their continued existence: nature needs people.

Thirty-one of the North West’s museums have significant natural history collections, amounting to 7 million museum specimens.

They help people develop their understanding of nature, to appreciate its value and to have a positive attitude to their surroundings.

They also make a unique and vital contribution to nature conservation locally and globally.

Our natural history museums are ideally placed to reforge stronger connections between people and nature.
Our museums were founded in the 19th century as statements of civic pride and confidence, with wealth from the industrial revolution. They include the only English National museum outside of London with natural history collections (Liverpool), the largest university museum in the UK (Manchester) and a wealth of museums of all sizes and shapes.

They are all firmly rooted in their towns and cities, and have helped generations of people explore and understand their natural and cultural heritage. We should feel proud of what they have achieved over the last century and more, as public institutions. They have helped bring nature into the city and culture to rural communities.
North West natural history museums currently attract over 2 million visitors each year, mostly from their local communities and the North West. Visiting museums has never been more popular: visitor numbers are booming.

Three of the 10 most popular free visitor attractions in the North West are natural history museums. (Visit England)

Our museums feed people’s curiosity. They visit exhibitions and take part in events, mostly for free. School groups visit to study science, art, history, English, geography and citizenship.

Our museums are a reference point in the lives of many local people. They visit as children, as adults and with their own children and grandchildren.

2 million visitors each year
<table>
<thead>
<tr>
<th>Number</th>
<th>Museum Name</th>
<th>Established</th>
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<tbody>
<tr>
<td>1</td>
<td>Tullie House Museum and Art Gallery, Carlisle</td>
<td>1893</td>
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<td>2</td>
<td>Penrith and Eden Museum</td>
<td>1883</td>
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<td>3</td>
<td>Helena Thompson Gallery, Workington</td>
<td>1940</td>
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<td>4</td>
<td>Keswick Museum and Art Gallery</td>
<td>1899</td>
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<td>5</td>
<td>The Beacon, Whitehaven</td>
<td>1923</td>
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<td>6</td>
<td>Armitt Museum and Library, Ambleside</td>
<td>1912</td>
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<td>7</td>
<td>Beatrice Potter Gallery, Hawkshead</td>
<td>1880s</td>
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<td>8</td>
<td>Ruskin Museum, Coniston</td>
<td>1901</td>
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<td>9</td>
<td>Brantwood, Coniston</td>
<td>1870s</td>
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<td>10</td>
<td>Kendal Teaching Museum</td>
<td>1796</td>
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<td>11</td>
<td>Dock Museum, Barrow-in-Furness</td>
<td>1907</td>
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<td>12</td>
<td>Clitheroe Castle Museum</td>
<td>1972</td>
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<td>13</td>
<td>Towneley Hall Art Gallery and Museum, Burnley</td>
<td>1901</td>
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<td>14</td>
<td>Harris Museum, Art Gallery and Library, Preston</td>
<td>1879</td>
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<td>15</td>
<td>Museum of Lancashire, Preston</td>
<td>1972</td>
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<td>16</td>
<td>Blackburn Museum and Art Gallery</td>
<td>1874</td>
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<td>17</td>
<td>The Whitaker, Rossendale</td>
<td>1902</td>
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<td>18</td>
<td>The Atkinson, Southport</td>
<td>1876</td>
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<td>19</td>
<td>Touchstones, Rochdale</td>
<td>1903</td>
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<td>20</td>
<td>Bolton Museum and Art Gallery</td>
<td>1852</td>
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<td>21</td>
<td>Museum of Wigan Life</td>
<td>1878</td>
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<td>22</td>
<td>Gallery Oldham</td>
<td>1883</td>
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<tr>
<td>23</td>
<td>Portland Basin Museum, Ashton-under-Lyne</td>
<td>1875</td>
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<tr>
<td>24</td>
<td>Manchester Museum, University of Manchester</td>
<td>1821</td>
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<td>25</td>
<td>Stockport Story Museum</td>
<td>1860</td>
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<td>26</td>
<td>World Museum Liverpool</td>
<td>1853</td>
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<td>27</td>
<td>Victoria Gallery and Museum, University of Liverpool</td>
<td>1892</td>
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<td>28</td>
<td>Warrington Museum and Art Gallery</td>
<td>1848</td>
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<td>29</td>
<td>Tatton Park, Cheshire</td>
<td>1920s</td>
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<td>30</td>
<td>West Park Museum, Macclesfield</td>
<td>1898</td>
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<td>31</td>
<td>Grosvenor Museum, Chester</td>
<td>1886</td>
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Our collections

There are 7 million natural history specimens in North West museums, animal, vegetable and mineral. They include many unique and historic specimens, extinct species as well as the most common and everyday animals, plants and natural materials. Our collections also include scientific illustrations, archives and scientific equipment.

These collections are the product of three centuries of collecting activity by hundreds of thousands of people, including the most famous scientists and explorers, and local people. They represent both cultural heritage and our shared natural heritage. They are a unique and irreplaceable resource for understanding and appreciating the world around us.

(Scientific illustration of bats by Beatrix Potter, from The Armitt)

7 million natural history specimens

a unique and irreplaceable resource . . .
Specimen labels provide important evidence of where animals and plants live, or used to live. Scientists analyse specimens to monitor changes in the environment, for example pollution levels and the effects of climate change. Experts take small samples of DNA from preserved animals and plants, to understand the relationships between species and changes in genetic diversity over time. New analytical techniques can be applied to preserved specimens to answer questions about the past. Important collections are found in some of our smallest museums, as well as in the largest. Museums still collect specimens, although at a slower rate than they used to.

We have enormous collections from all around the world, including the best collections of North West nature anywhere.

Most of our collections are kept ‘behind the scenes’ as a kind of reference encyclopaedia of the natural world. Experts study these collections to answer new questions about living nature.

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- Experts take small samples of DNA from preserved animals and plants, to understand the relationships between species and changes in genetic diversity over time.
- New analytical techniques can be applied to preserved specimens to answer questions about the past.
- Important collections are found in some of our smallest museums, as well as in the largest.
- Museums still collect specimens, although at a slower rate than they used to.
Contact with nature has been shown to have lots of positive effects on people’s health and fitness, lowering blood pressure and reducing recovery times from illness. It helps people cope with stress and maintain concentration, to have a positive outlook and to generally feel satisfied with life. (Natural England 2012)

Nature is also important as it provides us with resources and supports our society and economy. For example, wild bees help produce many of our daily foods.

“Regular opportunities to experience nature have positive impacts on mental and physical health, learning and relationships between neighbours. Nature can benefit us at all stages in our lives.”

(National Ecosystem Assessment 2011)
The challenge we face

The North West has some of the UK’s finest natural places, but our towns and cities include some of the most deprived parts of the country.

Access to nature decreases as deprivation increases, which means that the people who could benefit most from nature have least access to it.

There is also evidence that people are less connected to nature than they used to be. For example, the proportion of children who play in nature has declined by over 75% in the last 30–40 years.

(Natural England 2009)

How museums can help

Natural history museums can help more people develop their own understanding of nature, to appreciate its value, and to have a positive attitude to their surroundings by:

- connecting people with the incredible variety of nature
- allowing people to explore nature in their own ways and at their own pace
- helping people make the most of their time with nature
- encouraging people to experience nature outdoors for themselves, and to weave nature into their lives
- providing people in urban areas with increased access to nature, supplementing the low levels of nature available nearby
- reaching out to more people, including children, minority groups and low-income households
Nature needs people

Nature needs our help. The ‘State of Nature’ report (2013) found that nearly two out of every three UK animal and plant species are rarer than they were 50 years ago. Many wild bee species are threatened with extinction. The problem is worldwide and the ‘Living Planet Report’ (2014) found that there are half as many individual birds, mammals, reptiles, amphibians and fish as there were 40 years ago.

Major environmental issues, including biodiversity loss and climate change management, will require people to understand the issues, to know what they can do about them, and to care enough to want to do something about them.

“It is crucial to engage more people in biodiversity issues so that they personally value biodiversity and know what they can do to help. Civil society organisations play a frontline role, directly engaging and enthusing the public about biodiversity.”

(Biodiversity 2020)
The challenge we face
Nature will continue to decline unless positive steps are taken to conserve species and wild places for the future. Encouragingly, conservation actions can reverse the tide, and many organisations and people are already doing their bit to help preserve nature, but much more needs to be done.

How museums can help
Natural history museums can inspire and encourage more people to actively support nature, and support scientists and conservationists by:

- helping people recognise, understand and appreciate nature, both nearby and worldwide
- helping people explore and understand environmental issues, and what can be done about them
- helping people understand the impacts of their everyday choices on nature
- supporting and challenging people to take personal actions that are good for nature
- helping experts understand nature, and the effects people are having on nature
- helping experts understand what nature needs to thrive, informing conservation decisions today
Nature in the North West

The North West is still home to many amazing species and has some of the most stupendous natural spectacles and wild places in the UK, from the mountaintops of the Lake District to the sand dunes and mud flats of the coast. Urban parks and green spaces help bring nature into our towns and cities. Our region contains nature to be proud of, and our natural history museums help people connect with the nature on their doorstep.

- The Morecambe Bay area is the only place in the world where the Lancaster Whitebeam is found.
- The rare Willow Tit has its UK stronghold in brownfield sites near Wigan.
- Rare Natterjack Toads breed in pools in sand dunes along the coast.
- Red Squirrels are still relatively common in Cumbria and near Formby.
- The North West attracts internationally important numbers of wild birds, including Whooper Swans from Iceland.
- Even Peregrine Falcons breed in our towns and cities!
Looking forward

Let’s try to imagine a future for the North West where people are healthy and fulfilled, living in communities they are proud to be part of. Where they feel connected at local and global levels, through active participation and exertion of personal choice. Where the economy flourishes in a stable environment, enabling regeneration. Where our green and wild places are full of wildlife, and are valued by people. Achieving this vision will involve both people and nature.

Natural history museums are in an ideal position to reforge stronger connections between people and nature. They have already achieved a lot and they have the potential to do much, much more, by working in closer partnership with the public, local authorities, third sector, schools, colleges and universities, and nature conservation organisations. Together, they can make it easy for people and nature to help one another out.
References and context

A 2014 UK survey found that . . .

95% of people were glad that natural places exist, even if they may never visit them.

94% of people considered having green space close to their homes important.

88% of people considered spending time outdoors to be important.

77% of people recycle items.

85% of people were concerned about damage to the natural environment.

2.93 billion visits were made to the outdoors in England from March 2013 - February 2014, almost half of which were for health reasons. These generated £17 billion in expenditure.

778 million visits were made to parks in towns and cities. People less likely to visit the outdoors included the BAME population, people from lower-income socio-economic groups, people aged over 65 and people with a long-term illness or disability (Monitor of Engagement with the Natural Environment 2013-14).


7 Million Wonders was developed on behalf of North West museums with natural history collections, and was made possible with funding from Museum Development North West. A small group of people worked extremely hard to bring this project to life. They were:

Henry McGhie, concept and content
Sarah Crossland Design, creative direction and design
Paul Cliff, commissioned photography

Special thanks to Rachel Webster, Paul Simpson and family, and the Cliff family.

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Additional images came from World Museum Liverpool, Bolton Museum and Art Gallery, and Manchester Museum. Peppered Moth (Olei, creative commons), Drigg Coast, Cumbria (Natural England/Peter Wakely, creative commons, modified), Lancashire Whitebeam (R Burkmarr, T Riden), Willow Tit (FC Franklin, creative commons), Natterjack Toad (Natural England/Peter Roworth, creative commons), Red Squirrel (Natural England/Alan Drewitt, creative commons), Whooper Swans (gdzy, creative commons, modified), Peregrine Falcon (Paul Cliff).

Front and back cover, Royal Cloak Scallop, Manchester Museum (Paul Cliff).