

# Helping local people get personal benefit from local nature



**Dr Becca Lovell.**

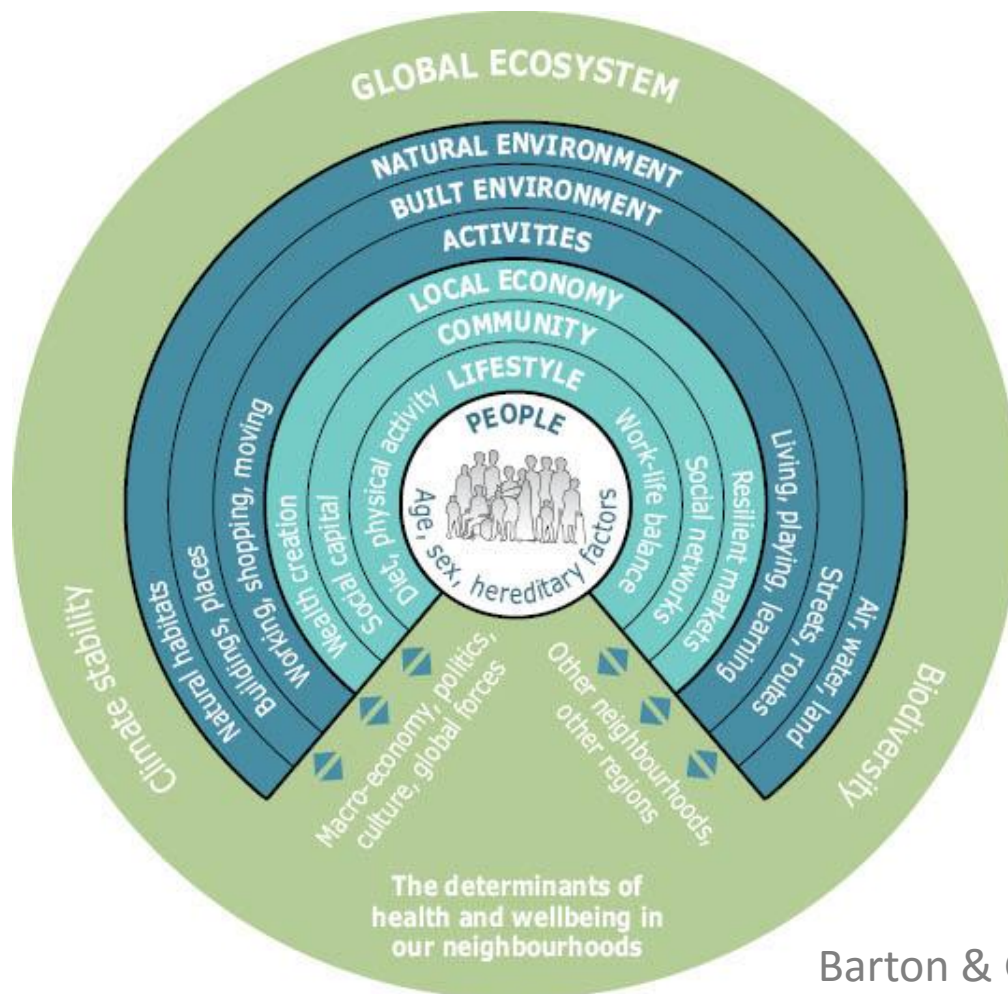
**Research Fellow Biodiversity and Health, University of Exeter Medical School  
and Defra Fellow. Northamptonshire LNP meeting. September 2015**

# Helping local people get personal benefit from local nature.

- Place and the determinants of health
- Are natural environments important for health?
- What makes a natural place healthy
  - Quality
  - Qualities
  - ineQualities



# Determinants of health



Barton & Grant, 2006

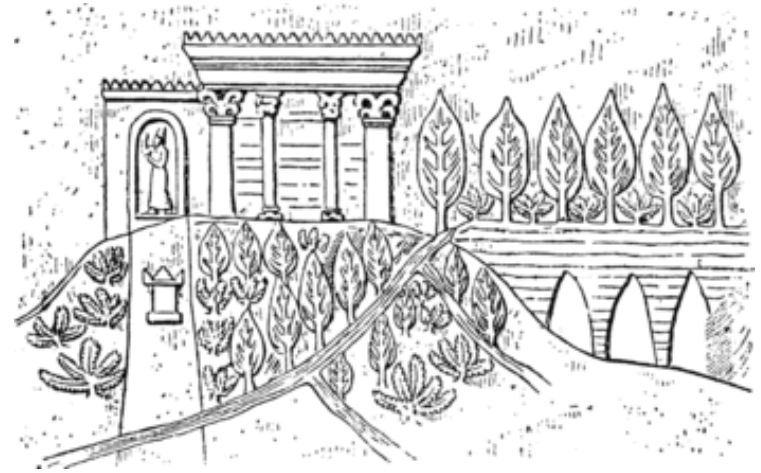


**Whether people are healthy or not, is determined by their circumstances and environment...** factors such as where we live, the state of our environment... have considerable impacts on health... the more commonly considered factors such as access and use of health care services often have less of an impact

World Health Organisation. *The determinants of health.*

# Healthy landscapes

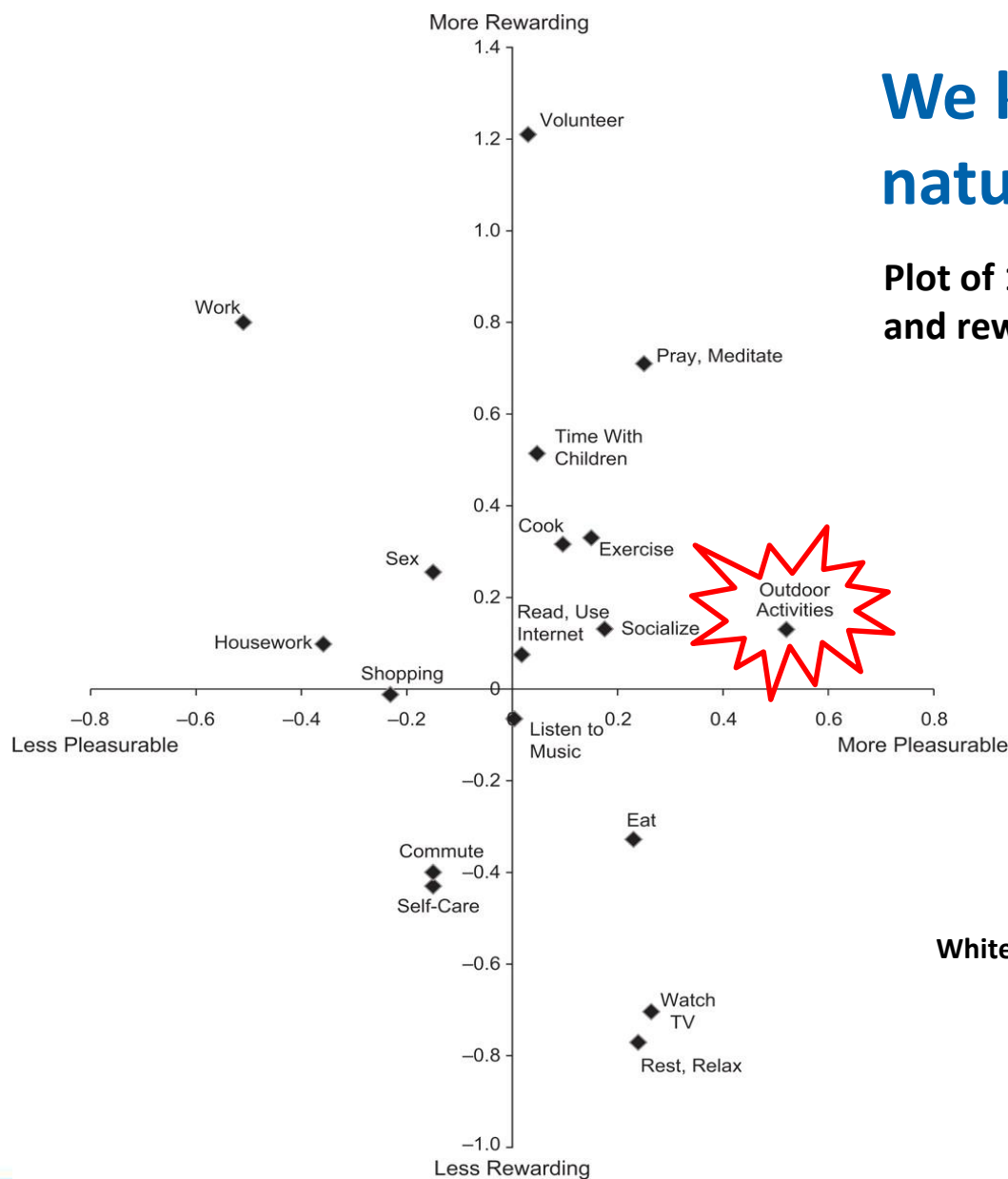
- Gardens of Egyptian nobility
- Walled gardens of Mesopotamia
- ‘Solvitur Ambulando’
- Urban parks in the 19<sup>th</sup>C developed for the health and happiness of urbanites (Rohde and Kendle, 1997)
- Frederick Law Olmstead in the 19<sup>th</sup>C said the benefits of nature *‘operate by unconscious processes to relax and relieve tensions created by the artificial surroundings of urban life’*
- Sanatoriums





# We know people value nature contact

Plot of 18 activities according to scores for pleasure and reward.



White M P , and Dolan P *Psychological Science* 2009;20:1000-1008

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Psychological  
SCIENCE

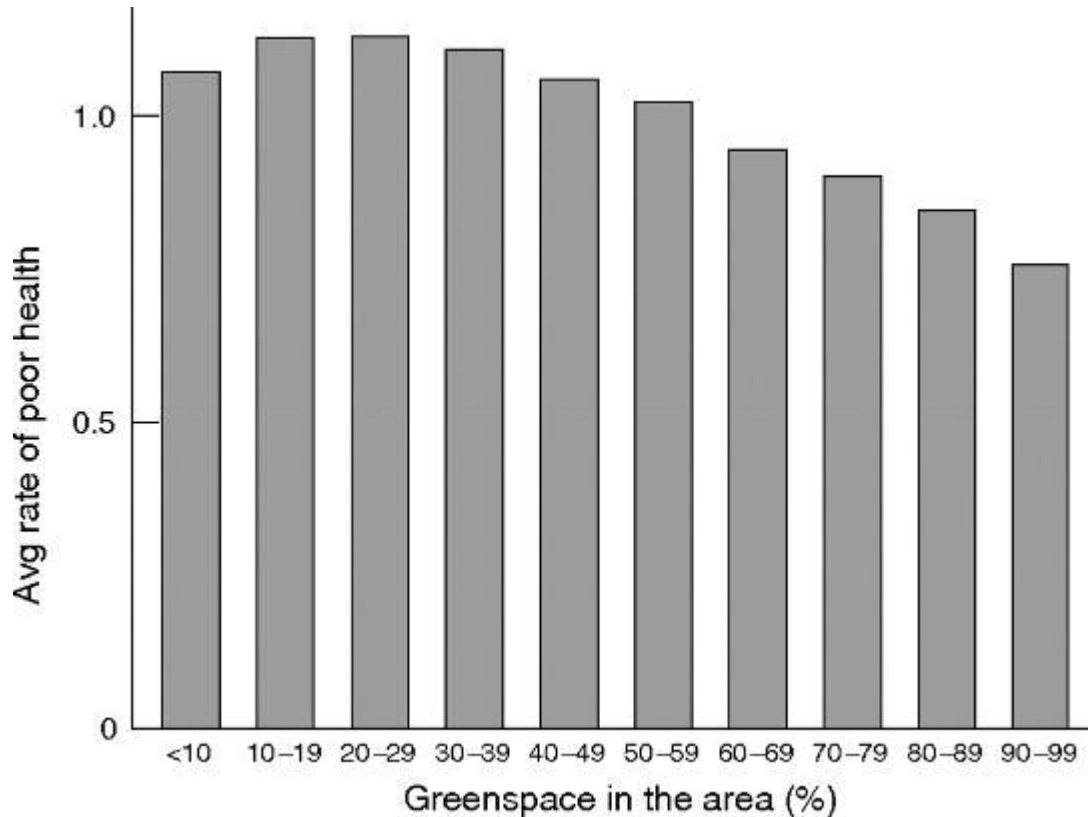


## Natural environments and health

- Population level associations between greenspace and health

# Relationship between the amount of greenspace in an area and rate of perceived poor health, derived from a regression model\*,

\*Model controlling for per cent of greenspace, employment deprivation, education, skills and training deprivation, barriers to housing and services, crime and income deprivation.



**JECH**

Mitchell R , and Popham F J  
Epidemiol Community Health  
2007;61:681-683



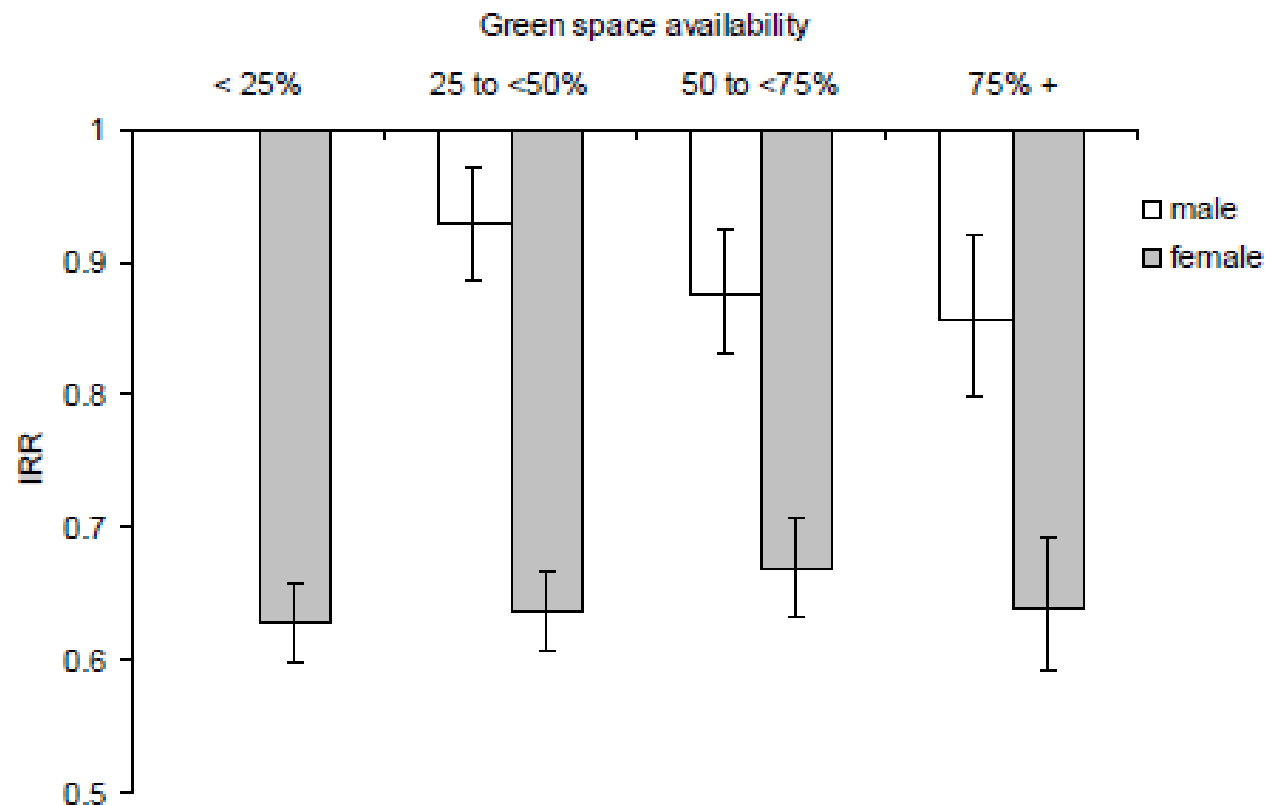


## Natural environments and health


- Population level associations between greenspace and health
- However we don't find the same effects across different populations, outcomes and places

# Gender differences in relationships between urban green space and health in the United Kingdom.

Male cardiovascular disease and respiratory disease mortality rates decreased with increasing greenspace for men but not for women.



Richardson, E A., and Mitchell, R. Social science & medicine 71.3 (2010): 568-575.

A woman with a backpack is sitting in a field of purple flowers, looking down. The background is a lush green forest.

## How can we help local people get personal benefit from local nature?

1. Natural Environmental Quality
2. Natural Environmental Qualities
3. Natural Environmental ineQualities





## 1. 'Quality' of the landscape: Biodiversity and health

Systematic review found some **evidence to suggest that exposure to biodiverse environments may relate to better health and wellbeing in humans**

**Secondary analysis of large scale datasets showed rates of good population health were higher in areas with a greater diversity of land cover types, with greater bird species richness and in areas with higher density of protected/designated areas**

[www.beyondgreenspace.wordpress.com](http://www.beyondgreenspace.wordpress.com)

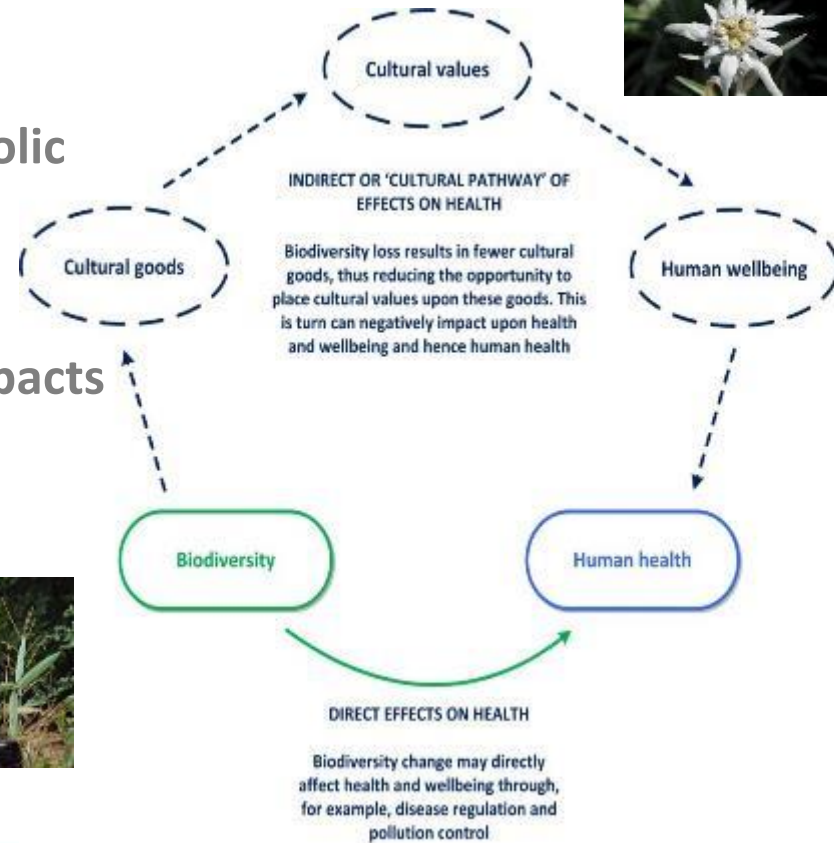


# 1. 'Quality' of the landscape: Biodiversity loss and human wellbeing

Humans have attached **cultural importance to biodiversity** for thousands of years, over and above its utilitarian value as food, sources of material or labour

Many plants and animals have enduring **symbolic significance**, appearing on national emblems, in folklore legends and religious documents.

**Loss of biodiversity may result in negative impacts to wellbeing**





## 2. 'Qualities' of the landscape

- Place vs. space
- Physical and social features of the place
- Some landscapes 'afford' more healthful opportunities than others
- How people respond to a landscape is variable and context dependant





## 2. 'Qualities' of the landscape: parks

"Pigeons in the Park"  
by Mark Hearld

"I put my trousers on, have a cup of tea and I think about leaving the house, parklife

I feed the pigeons I sometimes feed the sparrows too it gives me a sense of enormous well being, parklife

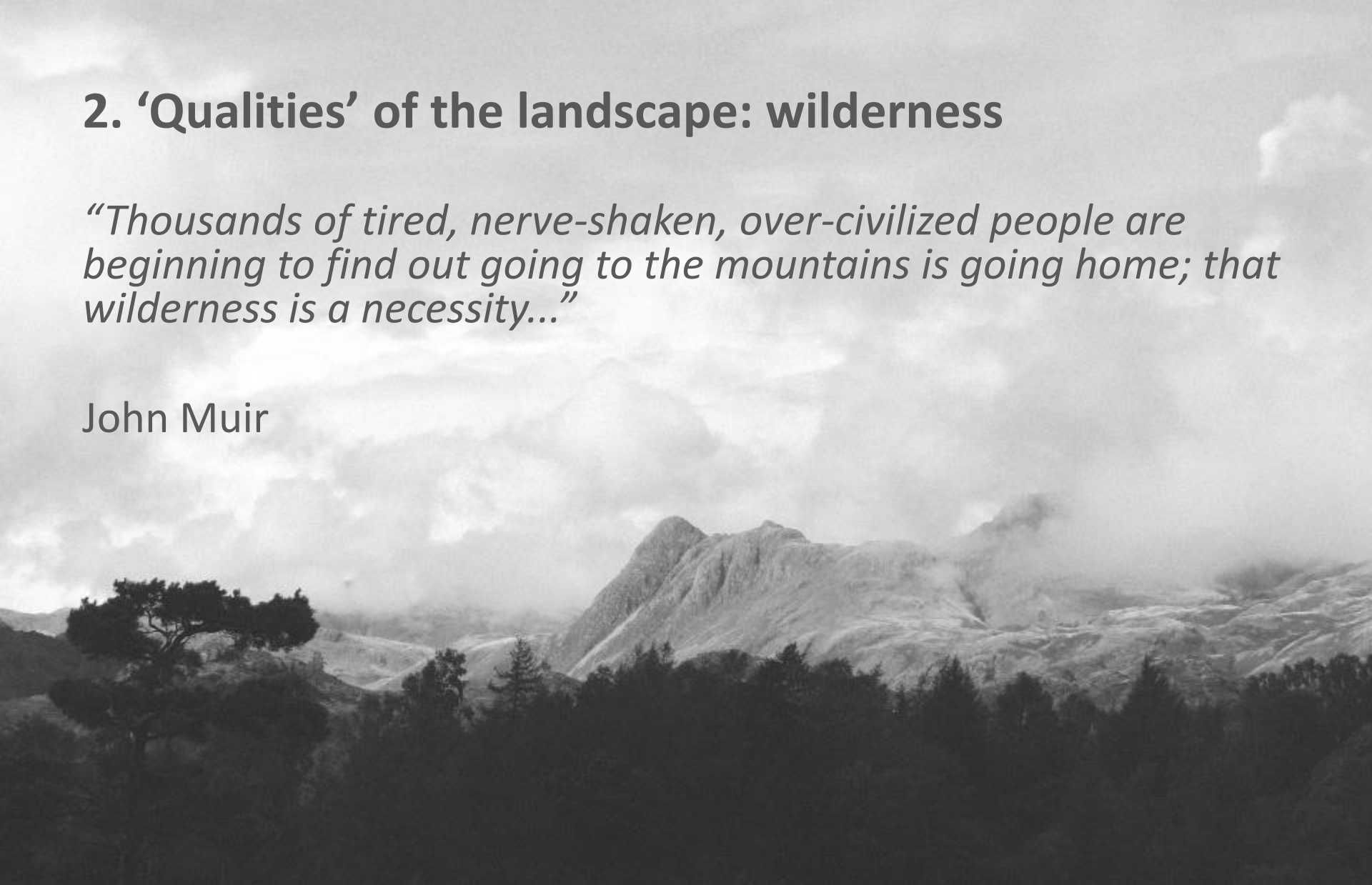
And then I'm happy for the rest of the day safe in the knowledge there will always be a bit of my heart devoted to it, parklife"

*Parklife. Blur*

## 2. 'Qualities' of the landscape: wilderness

*"Thousands of tired, nerve-shaken, over-civilized people are beginning to find out going to the mountains is going home; that wilderness is a necessity..."*

John Muir





## 2. 'Qualities' of the landscape: preventative health

Bill: *"I think young children you know, absorb you completely, see so I think between birth and seven, you know, you're very intensely involved in, in home and there is this crying need at that point... and at those points one would sometimes just drive down to Castle Drive to the Point and sit in the car and look at the sea for an hour, just for some sanity ((laughs)), and then come back again"*

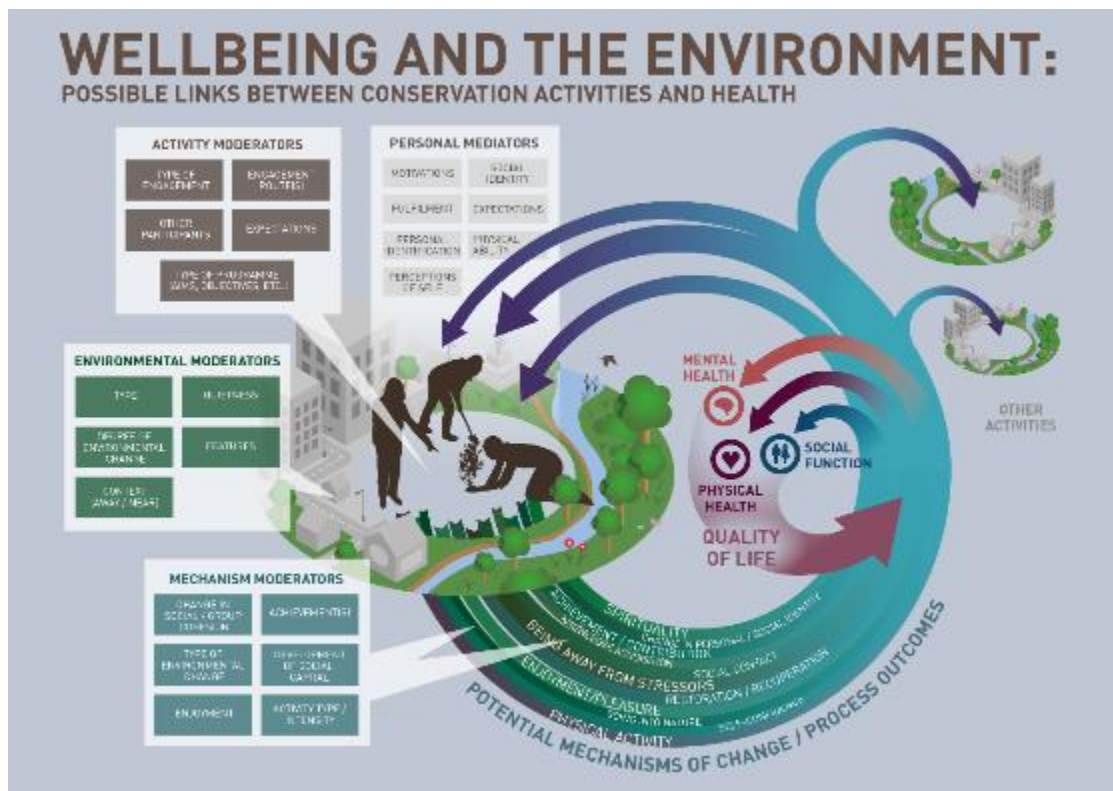
**Seeking everyday wellbeing: The coast as a therapeutic landscape** 2015 SL Bell, C Phoenix, R Lovell, BW Wheeler. *Social Science & Medicine* 142, 56-67



## 2. 'Qualities' of the landscape: conservation activities to promote health (green prescriptions)

**NHS**  
National Institute for  
Health Research

School for Public Health Research



### Positive processes:

- Mental health
- Quality of life
- Sense of achievement and contribution
- Contact with natural environment

*Understanding how environmental enhancement and conservation activities may benefit health and wellbeing: a systematic review. R Lovell, et al BMC public health 15 (1), 864*



### 3. 'ineQualities' of access

Not everyone is *able* to make use of natural landscapes

- children from black, asian and minority ethnic households less likely to visit natural environment than white children
- children from higher income households were more likely to visit frequently than children from lower income households

*Monitor of Engagement with Natural Environment,*  
Natural England, 2015



### 3. 'ineQualities' of use of the landscape, promoting use

While **dog walking is often key to getting people out** in their local landscapes (most common reason cited) **dogs can act as a barrier** to non-dog owning people

Toohey, A., & Rock, M. (2011). *Unleashing their potential: a critical realist scoping review of the influence of dogs on physical activity for dog-owners and non-owners*. International Journal of Behavioral Nutrition and Physical Activity, 8(1), 1-9.



### 3. 'ineQualities' of the landscape, promoting use



Comfort in natural spaces relates to **type and frequency of childhood experiences**

Ward Thompson, C., Aspinall, P., & Montarzino, A. (2008). *The Childhood Factor: Adult Visits to Green Places and the Significance of Childhood Experience* Environment and Behavior, 40(1), 111-143.

Some find natural spaces to be **frightening**

Milligan, C., & Bingley, A. (2007). *Restorative places or scary spaces? The impact of woodland on the mental well-being of young adults*. Health and Place, 13(4), 799-811.

### 3. 'ineQualities' of (social) landscapes

Shared cultural norms can influence whether a landscape is (perceived of being) healthy

Hitching's study of inner city workers use of local greenspaces found workplace practices determined how and when people used outdoor spaces

Hitchings, R. (2012). *Studying the preoccupations that prevent people from going into green space.* Landscape and Urban Planning.





## Conclusions

We should value the natural environment for its role in promoting and supporting good health

The impacts of exposure and use appear to vary according to the type and features of the place, the person experiencing it and their (and their community's and culture's) prior expectations and experiences

We need to find effective ways to value the natural environments in relation to health



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