

Nature in brief

8: Nature-based solutions



Peat forming blanket bog - © Norman Russell

The concept of **nature-based solutions** was first pioneered by the International Union for Conservation of Nature (IUCN) and is being promoted as a way of **harnessing nature to tackle 21st century challenges** such as climate change, food security, quality of life and economic development.¹

Conserving and enhancing biodiversity is not an obstacle to development and progress - rather it should be viewed as a way of **adding value to Scotland's socio-economic well being**; healthy ecosystems provide the **life support systems** upon which society depends.

It's a question of **changing our outlook** to solving problems – we don't always need to look for 'grey' or hard fixes when **soft or green solutions exist**. Think of flood prevention - the damage caused by river flooding costs Scotland at least £32m annually. **Cities need to become water smart** - Glasgow² is leading the way by 'designing in' green/blue networks to slow water movement - this helps manage flood risk and at the same time improves the quality and liveability of urban places and biodiversity.

Some parts of Scotland still have poor air quality.³ This causes and exacerbates childhood and adult asthma. **Planting street trees** to filter out harmful particulate matter (PM₁₀) is a **natural fix** for improving air quality,⁴ reduces health costs and increases the attractiveness of urban open spaces.

Quick wins in moving Scotland towards a low carbon economy can be achieved by **locking up carbon in peatlands and woodlands** - peatlands store c. 1,600 Mt of carbon, nearly 200 times the carbon contained within the nation's total annual greenhouse gas emissions. Woodlands and forests currently capture around 17% of Scotland's CO₂ emissions. **Restoring degraded peatlands and promoting natural woodland regeneration** by reducing overgrazing by deer and sheep, is a cost effective way of helping Scotland achieve its greenhouse gas emissions reduction targets.

For further information please contact:

Dr Maggie Keegan, Head of Policy. E mkeegan@swt.org.uk

What the Scottish Wildlife Trust would like to see:

- **A 2014-2015 budget priority being to invest more in enhancing Scotland's natural capital** such as peatland and native woodland restoration projects
- **An integrated approach to green infrastructure** in masterplanning and development design - as set out in the Scottish Government's *Green Infrastructure: Design and Placemaking*
- **Inclusion of a National Ecological Network (NEN)** in National Planning Framework 3 and Scottish Planning Policy
- **An integrated catchment management approach to alleviate flood risk** – using 'green' solutions to slow water movement and improve water quality.

1 See: 2012 IUCN Report

2 See: Guiding principles of the Metropolitan Glasgow Strategic Drainage Partnership

3 Key Scottish Environment Statistics 2013

4 National Ecosystem Assessment 2011: page 386