Scottish Wildlife Trust Briefing

Taking Scotland Forward debate:

Environment, Climate Change and the Land Reform



The Scottish Wildlife Trust believes it should be a priority for all parties to commit to a smarter allocation of resources and better use of policy incentives to protect and enhance Scotland's natural capital¹; it is fundamental to a flourishing Scotland. The Parliament and Government should recognise that:

"Access to, and the enjoyment of natural capital is an integral part of what makes human life so good. We are ultimately the product of natural capital ourselves, not separate from it. We are in E.O Wilson's words smart enough and have time enough to avoid an environmental catastrophe of civilization- threating dimensions. But we do need to get on with it.²

The Scottish Wildlife has identified our key priorities that we wish the Government and Parliament to pursue in this 5-year term to ensure that Scotland's natural capital is enriched and sustained - so the people of Scotland wherever they live - can enjoy the benefits that nature provides.

The Scottish Wildlife Trust's key priorities for the next 5 years:

- Full implementation of the United Nations Sustainable Development Goals
- Delivery of climate change mitigation and adaptation actions including a National Ecological Network
- A national policy on urban green infrastructure aimed at delivering health and wellbeing and tackling inequalities
- Ensuring the principles in the land use strategy are embedded in the land rights and responsibilities statement

The Sustainable Development Goals

"Sustainability is a political choice, not a technical one. It's not a question of whether we can be sustainable, but whether we choose to be"³

The Sustainable Development Goals (SDGs),⁴ are a universal set of goals, targets and indicators that UN member states have adopted to help frame their agendas and policies over the next 15 years. Scotland was an early signatory.

Whilst a general point concerning enacting the SDGs would be for the Government to report on the actions it is taking to fully implement the 17 SDGs, regarding this debate today Goals 8, 11, 13,14 & 15 must form the policy framework that the Government is committed to, thereby ensuring, inter alia: the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services (15); the sustainable management and protection of marine and coastal ecosystems (14); decoupling of economic growth from the environment (8); communities being provided with universal safe, inclusive and accessible green space (11); there is integration of ecosystem and biodiversity values into national and local planning, development processes poverty reduction strategies and accounts (15); strengthening resilience and adaptive capacity to climate-related hazards and natural disasters (13).

Climate change mitigation and adaptation

In December 2015, at the United Nations Climate Change Conference (COP 21) world leaders reached a global agreement – The Paris Agreement – aimed at tackling climate change.⁵

Article 7 regarding adaptation has the goal of:

enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.

The Trust wishes to see an ambitious mitigation and adaptation programme delivered – supported by all parties which includes:

- Protecting vulnerable ecosystems on land and sea
- Applying nature-based solutions⁶ e.g. using green infrastructure upstream and downstream in cities to reduce flood risk, green roofs for insulation, peatlands restored for more C storage, increased biodiversity and improved water quality
- A fully integrated climate change mitigation and adaptation programme aligned with: agricultural policy and subsidies; land use strategy, planning policy; forestry strategy; deer management; economic strategy/budget; community empowerment and land reform
- Committing to a National Ecological Network ⁷as a National Development in the next National Planning Framework – improving ecosystem health and resilience in the face of climate change
- · Monitoring and evaluation and adaptive management of the programme of actions

Urban green infrastructure

"Time in nature is not leisure time; it's an essential investment in our children's health (and also, by the way, in our own)."8

The environment we live in is hugely important in shaping our lives and consequently our health. Being in high quality greenspace is good for you and being able to access it from your doorstep encourages physical activity and is a stress buster. 9,10,11,12,13

Being able to enjoy the benefits that nature provides from your doorstep should not depend on where you live. Yet, it is still the case that the most economically deprived areas in Scotland are often the most nature deprived.¹⁴ It is also true that those living in areas with multiple deprivation have the highest combination of health problems and the poorest health.

Investing in nature, either by retrofitting and greening local public spaces for communities to enjoy or 'designing in' nature-rich greenspaces in new developments, would help tackle this health inequality and research shows it works.¹⁵

Children are entitled to the best start in life wherever they live; and as part of this they need contact with nature for healthy childhood development. The benefits for children from connecting with nature - 'Natural Ritalin ' are well known^{16, 17} and include reducing the severity of childhood Attention Deficit Hyperactivity Disorder¹⁸ and helping in cognitive development.¹⁹

The evidence makes it clear: places where children live, play and learn must include natural features. This is also an essential part of tackling the inequalities in life chances that still exist for many of Scotland's children today.

The Trust believes Scotland needs a step change in how it tackles the underlying causes of ill health and social inequalities to move toward a healthier and environmentally just society. Nature has a role to play. The Government and Parliament should commit to a national green infrastructure policy which has the goal of increasing the quality and accessibility of urban greenspaces for all to enjoy. To realise this we recommend: planning policy on GI is strengthened,²⁰ there are increased links between Directorates relating to health and wellbeing, communities and the environment – to align policies and make better use of resources; all new build schools are required to have access to nature-rich places –as part of school grounds or within walking distance and funds are available for those without to retrofit GI; making it the norm to prescribe a 'green pill' where appropriate e.g. green gyms; community gardening, conservation activities; the suite of measure to deliver better mental health care include access to nature for children and adults alike.

Land rights and responsibility statement

Land managers are among the most important stewards of Scotland's natural capital. With natural capital, like with financial capital, when we draw down too much from our stock we run up a debt which needs to be repaid. Land management can enhance natural capital but it also has the potential to significantly degrade it – which is not only an environmental liability, but a social and economic liability too. There are increasing signs of strain directly associated with the management of natural capital, for example flood impacts and siltation associated with changes in tree and scrub cover and simplification of watercourses, fish death from eutrophication from the use of fertilisers

on degraded soils and water discoloration and sediment load from peatland erosion leading to higher water management costs.

Therefore it is important that land users act responsibly to manage Scotland's land to maximise public benefits. By this we mean in a way that enhances biodiversity, increases carbon sequestration to mitigate climate change, improves water, soil and air quality, and through improving ecosystem health, helps communities be more resilient to climate change.

The Land Rights and Responsibilities Statement will be key to the continued evolution of land reform and shape how land is used. We owe it to the people of Scotland to get the policy right – this means, inter alia, considering how best to maximise the public interest. The Government has already set out the principles governing land use choices in the Land Use Strategy (LUS) and the Trust believes a strong connection between the LUS and the LRRS is needed so that the all those who have land rights contribute to:

A Scotland where we fully recognise understand and value the importance of our land resources, and where our plans and decisions about land use deliver improved and enduring benefits, enhancing the wellbeing of our nation.21

If Government and the Parliament want to realise better economic, social and environmental outcomes for all, then there is an absolute requirement to protect and enhance natural capital and for all land managers this will mean greater emphasis on delivering environmental outcomes in connection with all policy areas: land reform, economic, planning, agricultural, forestry, historic environment, tourism and landscape-scale management.

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- Dieter Helm 2015: Natural Capital valuing the planet. Yale University Press.
- ³ Gary Lawrence, Director of Seattle Planning Department, USA
- ⁴ https://sustainabledevelopment.un.org/?menu=1300
- ⁵ See: https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf
- ⁶ See for example- https://ec.europa.eu/research/environment/index.cfm?pg=nbs
- ottishwildlifetrust.org.uk/docs/002_057 natureinbrief_anationalecologicalnetwork_feb2013_1365512233.pdf
- ⁸ Richard Louv, Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder
- ⁹ Forest Research (2010). Benefits of green infrastructure. Report by Forest Research. Forest Research, Farnham
- ¹⁰ Tanaka A., Takano T., Nakamura K., (1996) Health levels influence by urban residential conditions in a megacity. Tokyo Urban Studies 33: 879-945.
- ¹¹ Sugiyama T., Thompson C.W., (2007). Older people's health, outdoor activity and supportiveness of neighbourhood environments. Landscape and urban planning. Vol 83 (2-3) 168-175
- ¹² Jonker, et al. 2014 The effect of urban green on small-area (healthy) life expectancy J Epidemiol Community Health; 68:999–1002.
- ¹³ Mitchel et al. 2015 Neighborhood Environments and Socioeconomic Inequalities in Mental Well-Being. American Journal of Preventive
- Allen, J. (2013) Health Inequalities and Open Space. Presentation. UCL Institute of Health Equity
- ¹⁵ Mitchell R, Popham F (2008). Effect of exposure to natural environment on health and inequalities: an observational population study. The Lancet, Volume 372, Issue 9650, pp1655- 1660.
- 16 Kellert, Stephen R. "Nature and Childhood Development." In Building for Life: Designing and Understanding the Human-Nature Connection. Washington, D.C.: Island Press, 2005.
- ¹⁷ Moore, R. C., & Cooper Marcus, C. (2008). "Healthy planet, healthy children: Designing nature into the daily spaces of childhood." In S. Kellert, J. Heerwagen & M. Mador (Eds.), Biophilic design: Theory, science and practice. Hoboken, NJ: John Wiley & Sons, Inc ¹⁸ Faber Taylor, A., & Kuo, F. E. (2008). Children with attention deficits concentrate better after walk in the park. Journal of Attention Disorders
- OnlineFirst
- ¹⁹ Dadvand et al. 2015 Green spaces and cognitive development in primary schoolchildren PNAS 12 no. 26 7937–7942
- ²⁰ Many of the 'shoulds' regarding green infrastructure, natural environment, designated sites and woodlands need to become 'musts'
- ²¹ From the Scottish Government's Land Use Strategy

¹ Natural capital is Natural capital can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible.