

Foreword

SNH is proud to have been involved in Community Planning since its earliest days. We see our continuing contribution as particularly significant in implementing the place principle as recently adopted by Scottish Government and COSLA. While our level of engagement varies with circumstance across Scotland, we always aim to work along with Community Planning Partnerships to protect and enhance nature and ensure that everyone is able to enjoy and benefit from their contact with nature and the services it provides.

We have been keen supporters of the Christie Commission reforms introduced in 2011 with their focus on integration, preventative action and empowering communities, and we were pleased that the Community Empowerment Act of 2015 made us a statutory Community Planning partner with community planning duties. Through Community Planning we are working with partners, including local authorities, to develop ways in which nature can help us address our shared local priorities and reduce inequalities in outcomes, including those around health and wellbeing, as experienced by some communities.

This short publication provides an overview of many of the ways in which nature can help us address a range of socio-economic outcomes including inclusive economic growth, addressing climate change, reducing health inequalities, building stronger communities and empowering our young people. The climate emergency has reinforced our responsibility to focus on the practical measures we can take to support nature-based solutions. This publication includes many examples of inspiring activities that local partners are undertaking, and it lists practical resources. I hope you find this a thought-provoking and helpful guide.



Francesca Osowska, Chief Executive Scottish Natural Heritage.



Introduction

Scotland's nature comprises all our plants, animals and ecosystems, from urban parks, gardens, open spaces and countryside in and around our towns and cities to the more remote landscapes of our mountains, coasts and seas.

Nature is a key asset underpinning the economy, quality of life, and our health and wellbeing. Investment in its care, enjoyment and sustainable use can make an important contribution to the priorities of Community Planning Partnerships around people, place and climate change.

To help illustrate this in practice, this publication brings together a range of information and advice on nature-based solutions, alongside examples of practical actions that might be undertaken by Community Planning Partnerships.

It is aimed at everyone involved in Community Planning, including staff and elected members from partner public bodies, community leaders, members of voluntary organisations and interested members of the public.

Natural Benefits

Nature provides us with the basis for achieving sustainable and inclusive economic growth. Protecting and enhancing nature is therefore considered in the Scottish Government **Economic Strategy** as critical to ensuring Scotland's future prosperity.

The contribution made by nature to reducing risks to our health from air pollution, or the higher temperatures and flooding associated with climate change have long been recognised. The positive links between environment and human health are now well-established, supported by research from around the world and are reflected in a range of Scottish policies, including the **Public Health Priorities for Scotland** as agreed between COSLA and Scottish Government in 2018.

Nature is an important element in our response to the climate emergency; climate change and loss of nature are closely linked. Our changing climate is accelerating the loss of nature, and at the same time restoring nature can play a key role in helping us to address climate change and achieve net zero greenhouse gas emissions.

Nature contributes to many of the approaches Community Planning Partnerships are already adopting, such as preventative spend measures, community empowerment, place-based approaches, and the Just Transition Principles. Specific actions employing nature-based solutions can help to strengthen these approaches, for example by incorporating multi-functional green and blue infrastructure into settlements we support climate change mitigation, provide wildlife habitat and offer opportunities for everyone to connect with and benefit from nature.

The figure below illustrates the contribution nature can make to a number of interlinked outcomes for Community Planning Partnerships. The following sections provide further detail on each of these outcomes. They include key messages, practical actions and resources, and links to additional information.

The Climate Emergency and loss of nature

Develop climate change strategies that include nature
Invest in green infrastructure
Take action for pollinators

Inclusive Economic Growth

Attract inward investment through high quality places
Invest in key natural visitor attractions
Grow nature-based industries

Nature-based solutions

Young people, learning and play

Improve greenspace quality close to schools Provide places for outdoor leaning and play Co-design projects with young people

Health and wellbeing

Improve wellbeing through providing access to nature for all Improve and 'green' the active travel network

Embed green exercise in health practice

Stronger communities and sustainable places

Make more use of the whole public estate for people and nature Grow the network of quality greenspaces for people Support the use of greenspaces by all

The Climate Emergency and loss of nature

Key messages

Climate change and biodiversity are inextricably linked. Nature-based solutions will play an essential role in our transition to a net zero carbon economy.

The provision and management of green infrastructure rich in nature can help communities adapt to climate change.

Fact

The extent of coastal erosion in Scotland has increased by 39% since the 1970s with the rate of erosion doubling to 1m/yr¹.

Fact

A review of recent research suggests that many common animal species may not be able to evolve fast enough to adapt to climate change and will go extinct².

Nature plays a vital role in mitigating climate change: healthy woodlands, peatlands, soils and oceans absorb and store carbon. At the same time, nature can play an important role in helping us to adapt to many of the risks associated with climate change such as from increasing temperatures, flooding and sea-level rise.

Climate change is one of the key drivers of the loss of nature, and it amplifies the impacts of other threats to our wildlife, such as from invasive non-native species. This makes it all the more important that we seek to avoid negative impacts on biodiversity, and that public bodies in Scotland act to implement their duty to further the conservation of biodiversity.

Opportunities to enhance nature can be found everywhere. Even brownfield sites can be havens for wildlife and support some of the UK's most threatened species while often acting as the last 'wild spaces' in urban areas for local communities.

Local community groups can play a key role in helping to deliver 'nature-based solutions' to climate change through a wide variety of actions that can also help to empower local communities to act as stewards of their local environment.

Fact

68% of adults in Scotland are concerned about the loss of biodiversity³, and around a quarter of 16-24 year olds say they feel concerned about Scotland's wildlife⁴.

Fact

Well-designed and managed SuDS can host as many amphibian and invertebrate species as countryside ponds⁵.

- Develop local approaches to respond to the climate emergency that put biodiversity at the centre of decision-making processes, thus ensuring that local actions help to protect nature.
- Increase resilience to climate change in towns and cities by taking opportunities to invest in green infrastructure such as green corridors for people and nature, sustainable urban drainage systems (SuDS), green roofs, raingardens and living walls.
- Develop a local 'pollinators action plan'; this might include adopting sympathetic grass and roadside verge-cutting regimes, restoring and planting wildflower meadows, and expanding areas of woodland to increase the value of local greenspaces for pollinators.
- Support the Local Biodiversity Action Plan to co-ordinate and deliver actions to halt the loss of nature, or take the lead within the CPP to target and co-ordinate biodiversity actions by the partners.
- Implement strategies to eliminate invasive non-native species and to monitor and respond to any new arrivals.
- Consider how wider CPP priorities can be delivered in a way that secures positive effects for biodiversity.





Helping Scotland's Pollinators

A growing range of organisations are taking action for pollinators, for example by growing pollinator-friendly plants, trees and shrubs, by creating habitats to provide nesting and shelter opportunities, by leaving areas of grass unmown or reducing the number of cuts, and by encouraging others to make 'a pollinator pledge'.

Resources

Supporting a healthy and diverse natural environment with the capacity to adapt is central to The Scottish Climate Change Adaptation Programme 2019-24 - the Adaptation Scotland website provides resources aimed at developing a 'climate ready public sector' including a Capability Framework.

The Scottish Government Dynamic Coast project provides local projections and maps for natural and built assets at risk from future coastal erosion.

The Building with Nature framework is leading the way on a Green Infrastructure standard for developments. The Pollinator Strategy for Scotland provides advice on projects for pollinator-friendly habitats.

The Aberdeenshire 'pollinators action plan' is described in this case study.

SNH guidance on Local Nature Conservation Sites provides a framework for identifying and protecting local sites.

The Office for National Statistics publishes ecosystem accounts for urban areas that can be used to develop local natural capital accounts.

The Department for Environment, Food and Rural Affairs has published **What nature can do for you**, which provides a practical introduction to making the most of natural services, assets and resources.

Scotland's Environment Web presents information on the environment that different users can interrogate, for example it provides an interactive map of spatial data on heritage sites, parks & protected areas from many different public bodies.

Scottish Natural Heritage provides links to many sources of information on biodiversity. Useful starting points are the Biodiversity - what can you do and Biodiversity Duty Guidance and Advice pages.

Scottish Natural Heritage makes available Advice for planners and developers aimed at encouraging new developments that contribute positively to Scotland's nature and landscapes; it includes greenspace, flooding, coastal change, woodlands and other topics.

Scottish Natural Heritage has published its 'climate change commitments' summarising actions to address the climate challenge under broad themes, including 'supporting climate-resilient communities' which outlines work with local partners.

Young people, learning and play

Key messages

Natural play and contact with nature support young people's social and cognitive development and have a positive impact on their learning, health and wellbeing.

A range of accessible and good quality greenspaces close to home and school is an important resource for young people; more can be done to improve this resource and also to encourage use of it by young people.

More young people should be involved in the co-design of the services and programmes which affect them.

Fact

Lack of opportunities for outdoor play risks damaging children's development, and has been linked to obesity and the concept of nature defecit disorder⁶. Fact

Fewer than 10% of children now play in natural places; this compares to 40% of adults who did so when they were young⁷.

There is now much evidence showing that daily contact with nature is fundamental to the health, wellbeing and development of children and young people.

Natural play and contact with nature from an early age can help to cultivate pro-environmental values,

attitudes and behaviours in young people that will be needed to address the climate emergency and loss of nature.

Outdoor learning is an established component of Curriculum for Excellence with the good practice that now exists showing how this can help to close the attainment gap. Better provision and use of quality greenspace on, and close to, the school estate is needed to ensure that there are ample opportunities for young people throughout every stage of their education.

Using local greenspace near schools for outdoor learning and play can engage parents and grandparents, help to reduce vandalism, and increase positive use of these spaces by the whole community.

Beyond the school setting, there are ways to involve young people in nature through activities such as conservation volunteering, skills and training programmes. Building links to community sports hubs and informal recreational groups can also help to involve more young people.

Local greenspaces can play an important role as restorative spaces for young people that nurture good mental health and wellbeing.

Fact

Children from less affluent backgrounds and BAME communities are less likely to spend leisure time outdoors⁸.

Fact

In a 12 week outdoor programme (2 hrs per week) in West Lothian children gained on average 6 months in Mental Arithmetic and 2 months in General Maths⁹.

- Identify opportunities to work with planners and other partners to develop greenspace resources to support the delivery of Early Learning & Childcare (ELC) and outdoor learning provision.
- Develop programmes and projects to support play and contact with nature for young people, with young people involved in their design and implementation.
- Focus on areas of social deprivation in order to address inequalities in wellbeing and attainment in children and young people.
- Identify opportunities for developing green active travel routes to schools
- Identify opportunities for outdoor learning in local greenspaces.





Learning in local greenspace

Over 100 schools within, or serving disadvantaged areas, are being supported by local and national organisations to adopt and improve local greenspaces for regular outdoor learning and play with benefits for pupil attainment, development and wellbeing.

The General Teaching Council for Scotland has accredited the **Teaching in Nature** programme of professional development in outdoor learning.

Education Scotland provides Support for Professional Development in Outdoor Learning, with a range of resources including Curriculum for Excellence Through Outdoor Learning and Learning for Sustainability on dedicated pages within the National Improvement Hub.

Nature is at the core of Scotland's Outdoor Play & Learning Coalition Position Statement, which recognises that access to outdoor play and learning in diverse greenspaces and natural landscapes is underpinned by many Scottish Government policies and pieces of guidance and by The United Nations Convention on the Rights of the Child.

In 2018 Scottish Government published Out to Play: practical guidance for creating outdoor play experiences in early learning and childcare.

Resources

The Outdoor Learning Directory is a collective website portal developed by SNH and partner heritage and environment agencies in Scotland that signposts outdoor learning news, resources, funding, training and event information.

Learning through Landscapes in Scotland helps schools develop and use exciting outdoor spaces for play, learning, health and wellbeing by improving the use, design and management of outdoor areas.

SNH has developed many education resources including Beyond Your Boundary, an interactive package of ideas aimed at helping teachers to use local greenspaces.

Stronger communities and sustainable places

Key messages

Nature and landscapes help to create a sense of place and local identity for communities.

Local parks and greenspaces provide a focus for play and social interaction across generations, helping to build stronger communities.

More communities could be involved in the co-design and management of their local greenspaces.

Fact

A Social Return on Investment analysis of the Greenlink urban greenspace project around Motherwell found a return of £7.63 for every £1 invested¹⁰.

Fact

Edinburgh's urban forest provides ecosystem services worth over £1.82 million per year and removes 195 tonnes of pollutants¹¹.

The 2018 State of Scotland's Greenspace report shows that urban Scotland is already 'more green than grey'. Greenspace covers 54% of urban land in the proportions of amenity greenspace to private gardens to natural or semi-natural greenspace of around 4:3:2.

Volunteering and community action to monitor, care for and manage the natural environment can help to develop social capital and community resilience, improve people's physical and mental health and wellbeing, and build individuals' confidence, skills and employment prospects.

A range of landscape-scale strategies and plans provide vehicles for planning and delivering aspects of green infrastructure and its use. These include open space strategies, play assessments, outdoor learning strategies, core path plans and river catchment management plans.

The **Place Standard** can help communities, public agencies, voluntary groups and others to think about how natural spaces connect people with nature and contribute to developing high quality environments for everyone.

Fact

People are happier when living in urban areas with large amounts of greenspace¹².

Fact

Only around a third (36%) of households in the most deprived urban areas say there is a nearby natural environment or wooded area for children's play¹³.

- Develop, enhance and manage a network of high quality greenspaces close to where people live as community assets providing a wide range of benefits, particularly in areas of identified deficiency.
- Develop a more 'joined-up' approach to planning and managing the greenspace resource across the public estate.
- Develop new walkable routes that enhance biodiversity and provide opportunities for people to experience nature.
- Introduce benches and elements of green infrastructure such as street trees, raingardens and living walls along walkable routes to bus stops and local facilities to encourage and enable people to walk and spend time outdoors in contact with nature.
- Maintain support for public use of physical infrastructure by employing community greenspace officers, countryside rangers and other staff or volunteers.
- Change greenspace management to allow spaces and pathways to become more natural, while retaining 'clean' borders around wilder areas to sustain a 'maintained' look if required.





Green Infrastructure Strategic Intervention Fund

European funding provided through SNH is supporting major investment in green infrastructure and helping to build healthy and resilient communities in some of Scotland's more disadvantaged urban areas.

Resources

The Place Principle aims to bring a more joined-up, collaborative and participative approach to services, land and buildings across all sectors within a place.

The Place-based Working in Scotland Guides explain some of the approaches and tools that make for effective place-based working.

The Scottish Government Green Infrastructure Design and Placemaking guide shows how to integrate the natural environment into the design and retrofitting of developments.

The Scottish Government has published guidance on Green Infrastructure for Community Planning Partnerships.

The Scottish Green Infrastructure Forum provides **practical guidance** to householders on how to create raingardens.

Susdrain provides a range of resources on sustainable drainage and water-sensitive urban design.

Guidance for planners on Open Space Strategies and on green networks, greenspace and outdoor access are provided on the SNH website.

A report from greenspace scotland on Retrofitting urban parks to deliver climate change action describes various ways to retrofit green infrastructure into urban parks.

The Glasgow & Clyde Valley Green Network Partnership has produced a **Blueprint** for creating a strategic Green Network for the benefit of people and wildlife in the Glasgow City Region.

Making the invisible visible: the real value of park assets from the Commission for Architecture & the Built Environment (CABE), 2009 aims to improve our understanding of the value of parks and greenspaces.

The OS MasterMap Greenspace Layer is available through the One Scotland Mapping Agreement and Public Service Map Agreement to provide geospatial data to support planning, management and research. It covers settlements with population >500 plus a 500m buffer. It builds on the greenspace typology in Planning Advice Note 65 to categorise urban greenspaces into 22 types.

Health and wellbeing

Key messages

Nature is an under-utilised asset for improving public health and wellbeing; it can contribute to prevention, treatment and care.

Encouraging people to connect with nature brings physical, mental and social health benefits at individual and community level.

Regular access to good quality greenspace has been shown to improve physical and mental health and well-being.

New activity should be focused on local communities or groups suffering most from poor health outcomes or other types of disadvantage.

Fact

Contact with nature supports active and healthier lives, reducing the risk of disease and stress, improving sleep, mood and self esteem and providing for social contact¹⁴. Fact

'Health and exercise' are the main reasons people in Scotland visit the outdoors, with 9 out of 10 outdoor visitors reporting improvements in their mental and physical health¹⁵.

There is an increasing range of compelling evidence to show how regular use and enjoyment of the natural environment has a direct impact on physical health and mental wellbeing and encourages and promotes positive behaviours. Visits to the outdoors are making a growing contribution to attaining Scottish Government targets for physical activity, with around 70% of all adults using the outdoors for physical exercise weekly, including 31% who meet the recommended minimum of 150 minutes of moderate activity per week. The largest area of growth in weekly visits is to local parks and greenspace.

Investing in public greenspace and local path networks and associated green exercise programmes such as health walks, green gyms or conservation therapy is a low-cost way to encourage physical activity and support better mental health and wellbeing. This approach can be especially important in communities experiencing limited access to nature within their neighbourhoods.

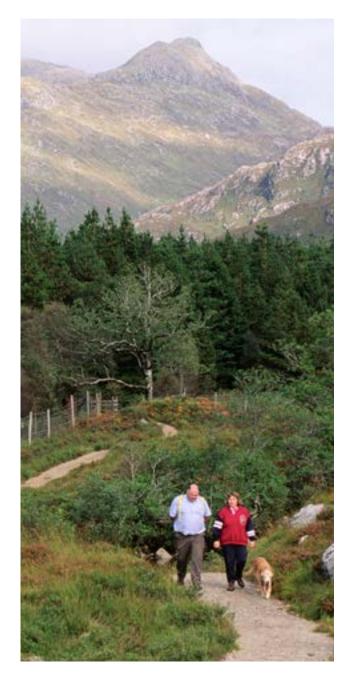
The 'Our Natural Health Service' programme is building stronger links between health, environment and other sectors to drive and co-ordinate increased use of natural places for prevention, treatment, recovery and care. The programme is led by Scottish Natural Heritage, working in partnership with Scottish Forestry, NHS Health Scotland, Transport Scotland, area health boards and local authorities.

Fact

46% of adults who live within a five minute walk from useable greenspace say they use it everyday or several times a week¹⁶. Fact

Accessible greenspace has been related to longer life expectancy, and communities living in greener environments experience lower levels of income-related health inequality¹⁷.

- Invest in greenspace, woods, parks, and paths to improve the quality and accessibility of the natural environment and greenspaces for everyone.
- Map existing opportunities for green exercise and explore the potential to address gaps, especially for disadvantaged communities.
- Build stronger cross-sectoral links between health, environment and other sectors to co-ordinate and develop programmes and projects that make use of the outdoors, contributing to priorities for prevention, treatment, recovery and care.
- Identify opportunities to improve and 'green' the active travel network between and within communities to provide affordable and effective alternatives to the private car.
- Ensure that Open Space Strategies maximise the opportunities that green infrastructure and other open spaces provide for activities that can help to reduce health inequalities and improve health and wellbeing for all.





Greenhealth partnerships

Greenhealth partnerships led by local health boards and local authorities are developing new approaches to mainstreaming nature-based solutions into public health approaches, including health promotion, referral pathways and social prescribing. to realise the potential of the NHS Outdoor Estate and community greenspaces as a community health asset benefiting patients, visitors, staff and communities. This report includes a policy review and two logic models that underpin the strategy and can be used to support the development of projects, assess applications for funding, and evaluate outcomes and impacts.

The **SNH website** provides information and examples of how to make more use of Scotland's outdoors as 'Our Natural Health Service'.

The Community Health Exchange provides an introduction to **social prescribing** which aims to encourage more use of community-based assets, including greenspace and supportive groups or programmes, to improve health and wellbeing.

For overviews of current evidence linking nature and health the University of Exeter has published **Health and the natural environment**: a review of evidence policy, practice and opportunities for the future, and an **Evidence statement** on the links between natural environments and human health.

Resources

NHS Health Scotland provides a 'cost effective actions overview' which focuses on evidence, resources and guidance around preventative measures to reduce health inequalities and meet future demand for health and social care.

The NHS Greenspace demonstration project aims to improve the quality and use of greenspace within the NHS estate, promoting better health and quality of life for staff, patients and local communities through greater use of the outdoors for physical activity and contact with nature.

The Edinburgh and Lothians Health Foundation Greenspace and Health Strategic Framework aims

Inclusive economic growth

Key messages

Nature is fundamental to our prosperity and it contributes to local economic growth.

A high quality local environment can provide a competitive advantage and help to attract and retain a creative and skilled workforce.

Nature supports a significant proportion of jobs and economic activity, especially in rural Scotland, for example in outdoor recreation, food and drink, tourism, agriculture, aquaculture, fisheries, forestry, and energy generation.

Fact

Total visitor spend per annum in Scotland attributable to nature-based tourism is £1.4 billion with 39,000 associated jobs¹⁸.

Fact

Visits to the Beinn Eighe National Nature Reserve contribute up to £765,000 a year to the local economy and secure up to 12.5 jobs in this remote rural area¹⁹.

Investment in natural capital provides an essential underpinning for sustainable and inclusive economic growth, and lies at the heart of Government's purpose. The Scottish natural capital: ecosystem service accounts 2019 (for 2015) estimated that Scotland's natural capital was worth in excess of £273 billion.

In 2015 Scottish Government **Growth Sector Statistics** indicated that the turnover from the energy, food and drink, and tourism sectors was £46bn, £14bn and £9bn respectively.

The natural environment can play a key role in implementing the **Just Transition Principles** by helping regional and local authorities to build environmentally sustainable economies and societies through low carbon investment and infrastructure while furthering social inclusion and reducing inequalities.

Natural capital accounting is a new approach aimed at helping us to make better decisions on how to use and protect our natural assets including plants, animals, air, water and soils, and the ecosystems they constitute by assigning monetary values to the various benefits deriving from them.

Nature can help make our towns and cities good places in which to live, and better quality green infrastructure can provide a catalyst for regeneration and economic investment.

Investing in environmental improvements such as remediating polluted land, greening vacant and derelict land, and incorporating green infrastructure into new developments are examples of preventative spend that can reduce the future costs of addressing flooding, pollution and poor public health outcomes.

Fact

The regeneration of Glasgow Green saw jobs in the area increase by 15% above that seen in other areas in the city²⁰.

Fact

The Fife coastal path supports an estimated 800-900 FTE jobs, with annual net expenditure associated with the route estimated to be £24m - £29m²¹.

- Develop a better understanding of the natural capital resource as a critical component of the local economy.
- Protect and enhance the natural environment in towns and cities to offer attractive, high quality places that can attract incoming workers and businesses.
- Invest in key natural assets that can act as tourism destinations such as local nature reserves and National Nature Reserves, local path networks, the National Walking and Cycling Network and Scotland's Great Trails.
- Support key nature-based industries in your area through improved co-ordination, marketing and promotion. For example, in Ayrshire and Argyll the public sector has supported collaboration between producers to promote local food.
- Implement the Skills action plan for rural Scotland: 2019-2021 through supporting enhanced work-based learning and increased access to education and skills in sectors including farming, forestry, fishing, and tourism as part of building an environmentally sustainable, skills-based, low-carbon economy.





The Central Scotland Green Network

Europe's largest green infrastructure project is working to transform Central Scotland into a place where the environment adds value to the economy by creating high-quality environments for businesses, bringing vacant and derelict land into beneficial use, and by increasing employment and training in land-based, 'green' and low-carbon industries.

Resources

The **SNH** website provides information on the social and economic benefits from natural capital and 'ecosystem services'.

Alive with Nature is an evidence-based analysis of the economic, environmental and social benefits of investing in the natural environment in Stirling.

The Greater Manchester Natural Capital Investment Plan 2019 builds a natural capital account for Greater Manchester based on green infrastructure assets and presents three finance models around Sustainable Drainage Schemes, Place-based Trusts, and Habitat & Carbon Banking.

The Ecosystems Knowledge Network has developed a Local Environment and Economic Development (LEED) Toolkit which is being used in England to help local partners collect and use information on the local economy / environment relationship to assist strategic economic decision-making by helping to reveal opportunities and threats.

The Central Scotland Green Network aims to deliver transformational change to the environment of the Central Belt thereby adding value to the economy and enriching lives through strategic investment in green infrastructure.

Several tourism destination management organisations promote nature-based tourism, for example the Cairngorms Tourism Partnership.

SNH provides online resources on Sustainable Tourism and has published a study of Nature Based Tourism in the Outer Hebrides.

VisitScotland publishes a number of 'insight papers' providing data on different tourism sectors, including 'wildlife and nature'.

Many initiatives support healthy local food and drink initiatives, for example Connect Local provides a local food and drink marketing advisory service, Food for Life supports health and wellbeing goals, and Neighbourfood provides examples of local food markets in Scotland, while The Stranraer Oyster Festival drew 14,000 visitors in 2018 and brought economic benefit of around £1M.



Conclusions

Community Planning Partnerships have a key role to play in facilitating the step changes needed for achieving more prosperous, inclusive, healthy, sustainable and carbon-neutral communities across Scotland.

There is a growing consensus and understanding that nature can help us address many of these shared outcomes and that we should take more account of the contribution made by nature to local economies, to the wellbeing and quality of life in our communities, to individual health, to the development of our young people, and ultimately to our future.

Working with nature to address shared outcomes and reduce inequalities is made all the more pressing by the climate emergency. Building a nature-rich future is now understood to be critical in addressing the causes and impacts of climate change.

Scottish Natural Heritage is keen to support this work. Through our network of local teams we aim to provide a service to communities, individuals, businesses, and public and private bodies. We will always endeavour to engage with Community Planning Partnerships where we feel we can make a real difference, and we are always willing to provide advice to partners.

This publication is available online www.nature.scot/people-place-and-climate-emergency-contribution-nature-community-planning-partnership-priorities

Contact details for our local offices are available on our website at nature.scot

For more information contact alan.cameron@nature.scot

References

¹The National Coastal Change Assessment (NCCA), Dynamic Coast mapping tool.

²Adaptive responses of animals to climate change are most likely insufficient, Nature Communications volume 10, Article number: 3109 (2019).

³Scottish Nature Omnibus Survey 2017, Scottish Natural Heritage Research Report No. 1004.

⁴Young adults and nature: key research findings, Scottish Natural Heritage, May 2019.

⁵O'Brien, C.D., 2015. Sustainable drainage system (SuDS) ponds in Inverness, UK and the favourable conservation status of amphibians. Urban ecosystems, 18(1), pp.321-331.

⁶Louv, R. (2008). **Last Child in the Woods**: Saving our children from nature-deficit disorder. Chapel Hill, US: Algonquin Books.

⁷Childhood and nature: a survey on changing relationships with nature across Generations, Natural England. 2009.

⁸Monitor of Engagement with the Natural Environment Children's Report (MENE) 2017-2018, Natural England 2019.

⁹Outdoor Learning Hubs: A Scottish Attainment Challenge Innovation Fund Project Report, 2017.

¹⁰O'Neill, E. (2009). Social return on investment (SROI) analysis of the greenlink, a partnership project managed by the Central Scotland Forest Trust (CSFT).

¹¹Doick, K.J., Handley, P., Ashwood, F., Vaz Monteiro, M., Frediani, K. and Rogers, K. (2017). Valuing Edinburgh's Urban Trees. An update to the 2011 i-Tree Eco survey.

¹²Would you be happier living in a greener urban area? A fixed effects analysis of panel data. The European Centre for Environment & Human Health, Psychological Science, 2013.

¹³Scottish Household Survey 2016: annual report, Scottish Government.

¹⁴A review of nature-based interventions for mental health care (NECR204), Natural England, 2016.

¹⁵SNH Research Report 1062 - Scotland's People and Nature Survey 2017-18 - outdoor recreation and health modules.

¹⁶Scottish Household Survey, 2017: annual report, Scottish Government.

¹⁷Mitchell, R. & Popham, F. 2008 Effect of exposure to natural environment on health inequalities: an observational population study. The Lancet 372(9650):pp. 1655-1660.

¹⁸Bryden, D.M., Westbrook, S.R., Burns, B., Taylor, W.A., and Anderson, S. 2010. Assessing the economic impacts of nature based tourism in Scotland, Scottish Natural Heritage Commissioned Report No. 398.

¹⁹SNH Commissioned Report 368 Natural Heritage as an Economic Driver: Protected Areas Case Studies, Moffat Centre 2010.

²⁰Green Infrastructure's contribution to economic growth: a review. A Final Report for Defra and Natural England, July 2013.

²¹Fife Coast Usage and Impact Study 2016. Fife Coast and Countryside Trust. LJ Research and the Glamis Consultancy, 2017.

© Photography: Front cover: View from Dundee Law © Lorne Gill/ SNH. P1: Forth & Clyde Canal in Glasgow © Lorne Gill/SNH. Francesca Osowska, Chief Executive and Accountable Officer, Scottish Natural Heritage © Lorne Gill/SNH. P2: Pond-dipping by the Forth & Clyde Canal, Old Kilpatrick © Lorne Gill/SNH. P5: Isle of May National Nature Reserve © Lorne Gill/SNH. Former amenity grassland area planted into wildflower meadow. Lennoxtown © Jim Jeffrey/SNH. P7: Exploring schoolgrounds, Thornlie P.S. Wishaw © Lorne Gill/SNH. Woodland in schoolgrounds, Longstone P.S. Edinburgh © Lorne Gill/SNH. P9. Canal towpath, Bishopbriggs © Lorne Gill/SNH. Bingham SuDS pond, Glasgow © Fiona Stirling, Abi Gardner/SNH, P11: Woodland trail, Ariundle NNR. Ardnamurchan © Lorne Gill/SNH. Polbeth Community Green Gym at West Calder © Lorne Gill/SNH. P13: Oyster farming at Culkein, Drumbeg near Lochinver © John Charity/SNH. The Kelpies at The Helix regeneration project, Falkirk © Ben Williams. P14: Greenhead Moss Community Nature Park, Wishaw © Lorne Gill/SNH.