# Prescribing nature to reduce health inequalities in rural communities.

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The Highland Green Health Partnership



## depression, coronary heart disease, stroke, type 2 diabetes, obesity and dementia<sup>1</sup>. Highland has an outstanding natural environment, but the health benefits of living in proximity to such natural greenspace are not necessarily achievable for everyone in

OUR NATURAL HEALTH SERVICE

ACTIONS

The Highland Green Health Partnership is one of four area-wide partnerships developed in Scotland through "Our Natural Health Service"; an action programme being led by Scottish Natural Heritage. It aims to encourage more use of the outdoors to tackle physical inactivity, mental health issues and health inequalities. Exercising in natural environments - compared to exercising indoors - is associated with a greater intention to repeat the activity<sup>2</sup> and is known to relieve the symptoms of depression<sup>3</sup>.

society, with isolation and access to services leading to challenges.

The Highland Green Health Partnership is working to promote the use of nature-based solutions to deliver health outcomes in rural communities.

### Our Natural Health Service Public Health Health & Social Care General population (incl. groups within general population) People with a defined need Everyday contact with nature Nature based Nature based health promotion Recreation social outcome Pastimes Health walks olunteering/ lherapeutic & exercise Green gyms Learning programmes as a Community growing Active travel treatment intervention

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Scotland's Natural Environment & Green Infrastructure

Some examples of nature based initiatives and interventions in Highland include:

• GPs are prescribing health walks to patients. There are 56 health walks in Highland, including bereavement walks, mental health, dementia friendly walks and those aimed at building strength and balance.

Highland is home to 322 000 people living in a Local Authority area that accounts for 10% of the total UK land mass. The population

is aging and as areas within Highland are among the most sparsely populated in the UK, there are significant costs in provision of

health & social care services. Making use of natural green spaces is known to guard against and manage key health issues such as

- Branching Out is a nature based intervention a programme for positive mental health delivered through Forestry Scotland. Clients are referred by health practitioners to three hours of forest activities per week, over approximately 12 weeks.
- The NHS Highland Cancer Care team, in collaboration with MacMillan, and Cycling UK, have provided five electric mountain bikes for use by patients undergoing cancer treatment and recovery.
- Alzheimer's Scotland have developed an innovative Tipi session for dementia patients and their families spending one day a month in the forest, cooking food, socialising and making arts and crafts from forest materials.
- Orthopeadic Surgeons at Raigmore hospital in Inverness, are developing a programme of pre-habilitation for patients awaiting surgery. It is hoped that increased activity levels in nature, in the weeks leading up to surgery, will result in improved recovery time and provide lifestyle change opportunities post-discharge.











In rural areas poverty and deprivation are more spatially dispersed than in urban areas and the Socio-Economic Index (SEP), as shown above, can be used to better reflects this<sup>4</sup>.

Greater health inequalities are experienced in areas of high deprivation<sup>5</sup>. Highland has 17 data zones in the most deprived 15% in Scotland. However, 85% of income and employment deprived people in Highland live out with areas recognised as containing concentrations of deprivation, living side by side with the more affluent in society.

# CHALLENGES

**Delivering services to those that need it most –** Due to the dispersed nature of the income deprived in Highland communities, targeting services by geographic location, can inadvertently lead to widening health inequalities as the more affluent find them easier to access.

Selling the health benefits to those who work in rural industries -Highland has a higher than national average number of people working in forestry, farming and fishing. For those working predominantly outdoors, the social benefits of prescribed health programmes may be of more value than the nature based elements.

Availability of suitable green space – It cannot be assumed that those living in rural areas value, or have access to, good quality greenspace. Rough topography, lack of toilet facilities, lack of pavements and poor public transport links all make accessing the outdoors challenging for those with higher health needs. High winds, ice, snow, and short day light hours in winter can make access dangerous for the elderly and frail in particular.

**Availability of volunteers** - Many green health activities are delivered by third sector organisations that rely on volunteers. Low population numbers in rural areas reduce the available pool of volunteers. Participation numbers required to sustain services are also harder to maintain. The short-term nature of available grant funding, can lead to fluctuations in service availability by locality.

# **NEXT STEPS**

The Highland Green Health Partnership is currently:

- Establishing a directory of available green health service for use by health and social care practitioners and referral pathways to these.
- Supporting service providers to help address health inequalities and sustain practice.

**REFERENCES: 1.** Evidence statement on the links between natural environments and human health, DEFRA(2017). 2. Coon et al (2011) Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. Environmental Science and Technology 45, 1761-1773 3. Berman M G Kross E and Jonides J (2012) Interacting with nature improves cognition and affect for individuals with depression. Journal of Affective Disorders 140 (3) 300-305 4. James Hutton Institute (2015) Mapping Rural Socio-Economic Performance (SEP) Report for Rural Communities Team, Food, Drink and Rural Communities Division, The Scottish Government). 5. Wilkinson RG, Pickett KE. Income inequality and population health: A review and explanation of the evidence. Social Science & Medicine 2006; 62(7): 1768–84















The Highland Green Health Partnership is currently made up of the following partners. More information can be found at: ww.thinkhealththinknature.scot