

# Project Update 2023

## Reciprocal Care for Nature and Wellbeing project

### Use of the Outdoors & Greenspace research in the Scottish Government Strategic Research Programme



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**Research Aim:** Policy makers, practitioners, and scholars are increasingly recognising the need to cultivate conditions for a reciprocal relationship between people and the environment. This is a relationship that nurtures the human community through engagement with nature and integrates care for, and responsible access to, nature by people.

The overall aim for the project is to investigate possibilities and constraints for building capacities for such a relationship through aspects of environmental settings (type, quality), users (barriers, behaviours), mechanisms for benefit (green prescribing, outdoor learning), and investment (costs, preventative spend).

We are working with and wish to disseminate findings to stakeholders from across sectors to generate timely, consequential, and solutions-oriented syntheses, and new evidence to support strategic decision-making.

**Key Drivers:** Increasing use of the outdoors is a Scottish Government National Performance Framework indicator. Encouraging, managing, and investing in this recreation has cross-sectoral policy significance relating to health, environment, planning, education, and tourism. The 'Our Natural Health Service' programme and 'green/nature prescription' initiatives aim to integrate the outdoors as a nature-based solution for public health challenges; related strategies include Active Travel, Walking, and Mental Health.

The Land Reform (Scotland) Act 2003 and 2016 provides for responsible access to Scotland's land / inland waters for recreation and education; and outdoor learning is part of the Curriculum for Excellence. Outdoor recreation and its responsible and sustainable facilitation are core to Scottish tourism, and to delivery of the Scottish Biodiversity Strategy.

The project includes three research strands:

- Investing in Quality Green and Blue Spaces
- Go: Girls Outside
- Nature Engagement Capabilities

#### Research Strand 1: Investing in Quality Green & Blue Spaces

The benefits gained from green and blue spaces depend on the quality of those spaces. In this research strand, we are working with stakeholders to create a validated green and blue space quality index, including measures of quality for the environment, people, society, and business. We are currently refining a long list of 72 indicators to identify the most important indicators for Scotland, and how these may integrate into policy at multiple scales. Over the next three years we will use these indicators to develop a toolkit for improving investment in quality green and blue spaces. For more detail on our quality metrics scoping review please go to [doi.org/10.5281/zenodo.8107161](https://doi.org/10.5281/zenodo.8107161). Further reports will be forthcoming.



## Research Strand 2: GO: Girls Outdoors

A literature review considered linkages between outdoor learning by pre-school and primary age pupils (3-12 year olds) with subsequent recreational visits to the outdoors by secondary school aged children and young adults. Identified gaps include the need for longitudinal studies to better understand the impact of early outdoor learning on later recreational outdoor visits, and the role of intersectionality factors (gender, ethnicity, socioeconomic status) on access to different types of outdoor spaces.

Building on this, our multi-year study engages with Primary 7 (P7) girls who live in an urban setting about their current and past outdoor experiences. Our goal for the first year of the study is to recruit and interview 35 girls. We will then re-engage with each participant to understand how their outdoor experiences have changed – or not – as they grow older. The study is open to anyone who might consider themselves to have experienced the outdoors as a girl at some stage in their life, for example, trans girls, non-binary persons, and other genders. As part of our recruitment, we are leading interactive sessions in P7 classes, aligning with Curriculum for Excellence 'My World of Work' learning. Within these sessions, we explore different types of science, and different kinds of jobs in science, and we invite the girls to take part in the GO study.



## Research Strand 3: Nature Engagement Capabilities

Using literature, existing data, the Scottish Outdoor Access Code, and novel field-based approaches, we develop and apply frameworks for understanding the opportunities and constraints for engagement with and care for nature. To help people understand what to expect before visiting the outdoors, we are exploring the use of 'virtual nature tours'. We created a virtual tour of the Oak Path at Cashel Forest, within Loch Lomond and the Trossachs National Park, which consists of 360-degree photography and time-lapse video. Hotspots along the path provide information through photographic slide shows, sound recordings, and wildlife videos. Information on parking, opening times, and the visitor centre is also included.

A linked survey seeks feedback on the usability and functionality of the tour to inform future iterations (e.g. including detailed accessibility information, customisable information for neurodivergent people) that can cultivate inclusive outdoor participation and responsible, careful access. **Please view the tour and give us feedback:** [Cashel Forest Oak Path virtual tour survey](#)

## How is this research funded?

The Reciprocal Care for Nature and Wellbeing project is funded by the Scottish Government under the Rural & Environment Science & Analytical Services Division (RESAS) Strategic Research Programme (SRP). The SRP is a 5-year programme of interdisciplinary research carried out primarily by the Government's Main Research Providers (MRPs). The James Hutton Institute is one of these MRPs.

The new SRP (2022-2027) commenced in April 2022. Within the 'Human Impacts on the Environment' theme (Theme C), one of the topic areas focuses on use of the outdoors and greenspace. This project builds on research undertaken in previous SRPs (2011-2016; 2016-2022).

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