



**Cairngorms**  
NATIONAL PARK  
Pàirc Nàiseanta a' Mhonaidh Ruaidh

MANAGEMENT PLANS

# A Learning Landscape Cairngorms National Park Research Strategy 2014-2017





# Cairngorms National Park Research Strategy

## A Learning Landscape

### Context

1. The Cairngorms National Park is the UK's largest National Park, delivering outcomes for conservation, visitor experience, communities and the rural economy. The integrated approach to management relies on a good understanding of the state of the Park, trends affecting it and the implications of management decisions across the environment, society and economy. Knowledge is required by many different groups with an interest in the Park including the Cairngorms National Park Authority and other public agencies, land managers, non-governmental organisations, business and education communities and together, these are our delivery partners.
2. The National Park has long been a focus for natural science research, creating a rich set of information already informing management. Increasingly, researchers are also interested in the socio-economic context of the Park, and in the collaborative management model of the National Park itself which is relevant to approaches to protected area management around the world.
3. As part of an international network of protected areas, management of the Cairngorms National Park should draw on the resource of research and lessons from elsewhere, as well as continuing to contribute experience to current practices and debates.
4. We want to promote research that addresses the management needs of the Park, often working across disciplines; to encourage connections between researchers and those working to manage land and/or resources within the Park, informing the research as well as sharing its results; and to make the most of the opportunity the Park presents to contribute to wider research agendas.

### Purpose of Research Strategy

5. The purpose of this strategy is to establish the Cairngorms National Park as a *learning landscape*, providing outstanding opportunities for collaborative research across disciplines that directly influences management in the National Park and wider agendas in Scotland and internationally.
6. The strategy sets out what is needed to promote and facilitate the collaboration and connections needed to deliver research that benefits the management of the Park, and make the most of the Park in wider research agendas.

### Strategy

7. Our strategy comprises four strands:
  - a) To inform the management of the National Park and delivery of the aims of the National Park by connecting research with management needs and providing data to monitor the State of the Park including long-term trends, changes and risks by:
    - i. Monitoring and collating data about the National Park;

- ii. Tailoring research outcomes towards practical management;
  - iii. Communicating the practical management implications of research;
  - iv. Developing a data management policy to secure long-term data storage and access;
  - v. Identifying key research needs where a cross-disciplinary approach is required.
- b) To connect research across disciplines and encourage place-based integration:
  - i. Promoting the Park as a 'learning landscape' in which many stakeholders collaborate in research and add value to research impact;
  - ii. Providing real place-based opportunities to integrate disciplines;
  - iii. Holding events to connect researchers working in the Park;
- c) To facilitate effective knowledge exchange connecting research and practice:
  - i. Establishing a web-based research hub for information on research projects and publications as well as connecting researchers with project opportunities and providing or signposting data and news;
  - ii. Making research findings widely available and publishing easily read summaries of research relevant to management needs;
  - iii. Building relationships between research institutions and people and organisations in the Park;
  - iv. Holding events to bring together researchers and the people who manage the Park;
  - v. Facilitating projects to demonstrate practical research outcomes.
- d) To promote the Cairngorms National Park as a significant focus for collaborative research contributing to national and international research agendas:
  - i. Using the Park as a case study in relevant national/international research projects;
  - ii. Promoting the Park as a cross-disciplinary research platform;
- 8. This strategy is underpinned by establishing the National Park in 2013 as the UK's first 'Long Term Socio-Ecological Research' (LTSER) platform, within the Alter-net and Environmental Change Network. Being an LTSER provides a framework, supported by Memoranda of Understanding with key partners, to deliver the collaboration and co-ordination required. This initiative also sets the National Park firmly within the wider international research context.

## **Delivery Roles**

9. Many organisations and sectors have roles to play in delivering the strategy:

### **10. The CNPA's role is to:**

- a) Co-ordinate information about research needs and priorities;
- b) Promote research needs, opportunities and outcomes;

- c) Facilitate knowledge exchange and connections between research and practice;
- d) Promote the Park as a Learning Landscape;
- e) Evaluate and lead review of the research strategy and research priorities for the National Park.

**11. The Scottish Government's and other public sector organisations' roles are to:**

- a) Use the National Park as a case study area in national/international research programmes, building on the existing research and data available;
- b) Share information and data across the administrative boundaries in the Park, including sharing research undertaken for them;
- c) Consider how the National Park can be used as a research platform to help deliver the Scottish Government's Rural and Environment Science and Analytical Services Division (RESAS) research strategy.

**12. UK/international research institutions' and universities' roles are to:**

- a) Use the National Park as a place for research, building on the existing research and data;
- b) Use the National Park Research Strategy to help devise research that will inform management of the Park and its land and resources through policy and practice, building in the needs of users when designing and implementing research;
- c) Use knowledge and expertise of funding mechanisms to promote and integrate research that helps deliver the National Park Research Strategy in research programmes and projects;
- d) Collaborate across disciplines and sectors to undertake research that best meets the needs of the National Park and its stakeholders;
- e) Share data and research outcomes within and across disciplines and with the CNPA to maximise its potential uses;
- f) Provide details of research papers and reports to be uploaded to research website.
- g) Build relationships with users of research and practitioners who can improve the impact of research on the ground;
- h) Guide postgraduate and undergraduate student research to priority research questions that help deliver the National Park research strategy.

**13. The private and voluntary sectors' roles are to:**

- a) Engage with, participate and collaborate in designing, developing and implementing research undertaken in the National Park and with the researchers who undertake it;
- b) Share data, knowledge and experience with researchers and within and across sectors;

## Our Research Priorities

14. Our research priorities are linked to the practical challenges of managing the National Park and its land and resources now and in the future. The National Park Partnership Plan is the key strategic plan that sets out how the aims of the National Park will be delivered together by a wide range of stakeholders, and we use it to help identify the research priorities. The research priorities below are for the period of the current Partnership Plan to 2017.
15. Our priorities will change over time, so we will review them annually to reflect progress and adapt to changing conditions or needs.
16. The Partnership plan sets out three long-term outcomes:
  - a) A special place for people and nature with natural and cultural heritage enhanced
  - b) A sustainable economy supporting thriving businesses and communities
  - c) People enjoying the Park through outstanding visitor and learning experiences
17. We have identified our research priorities by looking at the key research questions we would like to answer. Our integrated approach to management of the Park means that these questions cut across delivery of all three long-term outcomes.

Research Question	Research priorities to 2017
How do we maintain and enhance Natura habitats and species in a changing context of climate, development, recreation and land use?	<ul style="list-style-type: none"> <li>Measuring and monitoring cumulative effects of change and pressures on Natura objectives;</li> <li>Analysing the interplay of factors affecting capercaillie populations, including human disturbance and effects of management measures at a landscape scale;</li> <li>Systems-scale analysis of factors affecting river SACs and their capacity to cope with population increase;</li> <li>Impacts of plant/animal disease and invasive non-native species</li> </ul>
What is the natural capital of the Cairngorms National Park and what are the implications of management choices on ecosystem service delivery?	<ul style="list-style-type: none"> <li>Valuing natural capital;</li> <li>Trialling payment for ecosystem services;</li> <li>Ecosystem service assessments;</li> <li>Capacity of ecosystems to adapt to changes resulting from natural and human pressures in combination;</li> </ul>

	<ul style="list-style-type: none"> <li>• Alignment of ecosystem service delivery with existing agri-environmental measures and other policies (e.g. WFD)</li> <li>• New long term monitoring programmes for wider ecosystem services (beyond biodiversity)</li> </ul>
What are the socio-economic trends most likely to affect the Cairngorms National Park and how?	<ul style="list-style-type: none"> <li>• Effects of increased accessibility resulting from A9 dualling on economy, employment, visitor trends and housing demand;</li> <li>• Likely population changes and mechanisms for delivering affordable and mid-market housing in a remote pressured area;</li> <li>• Impacts of land reform and community empowerment Bill;</li> <li>• The impacts of regular participation in outdoor activities and outdoor learning on attainment and social values in young people or other groups.</li> </ul>
How are the visitor patterns, numbers and experiences across the Park likely to change?	<ul style="list-style-type: none"> <li>• Visitor types, numbers and distribution in time and space including more detail on minority groups and equality indicators;</li> <li>• Future visitor trends;</li> <li>• Visitor expectations and satisfaction;</li> </ul>
What are the most effective management and governance mechanisms to deliver the Partnership Plan?	<ul style="list-style-type: none"> <li>• Effectiveness of and future models for multi-sector and multi-agency governance and partnership delivery;</li> <li>• Capacity and opportunities for community ownership of assets and community-led development;</li> <li>• What is the role for citizen science in the Park</li> </ul>