
CAIRNGORMS NATIONAL PARK AUTHORITY

FOR DECISION

Title: NATIONAL PARK RESEARCH STRATEGY

**Prepared by: Gavin Miles, Strategic Policy & Improvement Manager
Hamish Trench, Director of Conservation and Visitor Experience**

Purpose

To seek the Board's approval of a Research Strategy for the Park.

Recommendations

That the Board consider and approve the Research Strategy including current research priorities.

Executive Summary

The Cairngorms National Park is already a focus for national and international research. There is an opportunity to improve the connections between research and management needs in the Park, and to raise the profile of the Park as a place for research. In particular the Park offers researchers a place in which to integrate different disciplines, connect into practice and networks.

With partners from the research community, we have developed a research strategy that is concise and simple, positioning the Cairngorms National Park as a '*learning landscape*'. The strategy sets out the roles different bodies and sectors need to play and a short list of research priorities to 2017. The delivery of the research strategy is underpinned by the development of the Park as the UK's first Long Term Social Ecological Research (LTSER) site and is supported by the CNPA's development of research web pages to link to and signpost research in the Park.

NATIONAL PARK RESEARCH STRATEGY – FOR DECISION

Strategic Context

1. The Cairngorms have long been a focal point for research and CNPA and others have benefitted significantly from the wide range of data and research carried out here. The National Park is also well positioned to contribute significantly to national and international research agendas.
2. At present, much research is under-used and could be better connected into the management needs of the Park. There is also a strategic opportunity to use the Park as a place to promote greater inter-disciplinary research in ways that help address long term collective delivery of the aims.
3. Recognising the opportunity, the National Park Partnership Plan 2012-17 commits CNPA to co-ordinating a research strategy to support delivery and long term planning.
4. Developing a clear strategy at this time helps position the Park positively in wider national and international initiatives. The Scottish Government is currently reviewing its rural and environmental research strategy, and Europarc is working across Europe to promoting better connections between research and management in protected areas.

Recent Progress

5. Knowledge-sharing events bringing together researchers and people involved in managing the Park were held in 2010 and 2013 with the help of the Centre for Mountain Studies and funding from a Knowledge Transfer Partnership (KTP) and the Beltane Public Engagement Network. Both events were a success and demonstrated the enthusiasm and support of the research community to improve the coordination of research, its application to real issues of management in the Park and the opportunity for the CNPA to lead a more joined-up approach to the formulation, promotion and sharing of research in the Park. Each of the events highlighted that a clear strategy for research and knowledge sharing for the Park was needed to improve the practical use of research findings in management of the Park and the active collaboration between researcher researchers and those managing the Park.
6. In 2013 the CNPA, with research institution partners, established the Park as the UK's first Long Term Social Ecological Research (LTSER) site. The LTSER places the National Park amongst an international network of sites where research bodies collaborate to improve the coordination and sharing of research and data, allowing different disciplines and institutions to make the most efficient use research and create a legacy of data that can be used in the long term. A research section was added to the CNPA website, to provide an information hub and signposting at www.cairngorms.co.uk/learn/research

7. A research steering group has developed the research strategy for the Park, drawing on their knowledge and expertise of research institutions, funding for research and understanding of best ways to position the National Park as a good place to do research. The group is made up of:
 - a) Martin Price, Centre for Mountain Studies, Perth College UHI and CNPA board member
 - b) Jan Dick, Centre for Ecology and Hydrology
 - c) Alison Hester, James Hutton Institute,
 - d) Andy Wells, The Crown Estate
 - e) Hamish Trench & Gavin Miles, CNPA

The Research Strategy – A Learning Landscape

8. The research strategy is for the National Park, not just CNPA. It is about making the most of the opportunity of the National Park for the people who manage it and for researchers with an interest in it. The strategy is about how research is done in the Park, encouraging inter-disciplinary and collaborative working, and what the research priorities are to inform long term management.
9. While CNPA and our partners commission some limited research directly, most is funded through national and international research funds, where researchers bid for funding with proposals of their own. The strategy therefore aims to provide clarity on the research priorities and opportunities to inform practice that will help others shape research proposals.

Strategic Policy Considerations

10. The research strategy is included as Annex I to this paper. The Board is asked to consider whether the proposed strategy delivers the brief to prepare a simple strategy that would:
 - a) Help co-ordinate research activities in the Park;
 - b) Improve the tailoring and targeting of research to provide findings and information that are useful to people managing the Park;
 - c) Share and raise awareness of research between researchers themselves as well as between researchers and people managing the Park;
 - d) Allow researchers to use the National Park in bids for research funding by providing a framework to demonstrate their research proposals would have real impact and help deliver the research strategy and aims of the National Park;
 - e) Allow the CNPA to set research priorities for the Park and to review them with partners annually to reflect changed circumstances, pressures or better understanding of issues.
11. This strategy should make it as easy as possible for researchers to use the National Park in their bids for research funding and the proposals they put forward. It should increase the likelihood of new research that is needed for future management of the Park and its utility for the CNPA or others involved in the planning and management of the Park. The strategy clearly sets out the roles of the main organisations and sectors involved in delivering the strategy.

12. We have deliberately identified a relatively small number of research priorities for the period to 2017 but with enough flexibility to allow researchers to link a diverse range of proposals to the National Park.

Recommendation:

- 13. That the Board approve the Research Strategy including current research priorities.**

Implications

Resource & Financial Implications

14. The most significant resource implication for CNPA comes in staff time to provide the coordination and dissemination of research, or to be involved in development of research. The CNPA staff time available for coordination and dissemination of research is limited so the steering group are investigating other sources of funding through the LTSER that could bring in dedicated resource. There is no budget in the CNPA operational plan to pay for such additional work.
15. CNPA's involvement in future research proposals needs to be assessed by individual directorates and teams to decide if the work is of sufficient priority to justify staff time. CNPA has a good track record of supporting research with data and advice where it will directly inform management priorities in the Park. CNPA will continue to fund research directly where have a clear lead role to do so, as we have for example on the visitor survey, economic baseline and review and evidence for the Local Development Plan. This expenditure is planned within the operational planning cycle for CNPA.

Stakeholder & Presentational Implications

16. There is considerable support and interest in the Research Strategy and the development of the National Park as an LTSER site amongst the research community. Researchers are increasingly obliged to demonstrate 'research impact' as a funding criteria and the strategy offers practical ways to deliver this. The research pages on the CNPA website are a starting point and further population with research will help to raise the profile of research in the Park and the opportunities that the research strategy provides.

Next Steps

- a) Promote the research strategy amongst the research community;
- b) Investigate opportunities to further resource the LTSER co-ordination;
- c) Review research priorities annually;
- d) Continue to develop the research web pages to connect researchers with opportunities that inform management.

**Gavin Miles
Hamish Trench**

2 June 2014

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"> • Measuring and monitoring cumulative effects of change and pressures on Natura objectives; • Analysing the interplay of factors affecting capercaillie populations, including human disturbance and effects of management measures at a landscape scale; • Systems-scale analysis of factors affecting river SACs and their capacity to cope with population increase; • Impacts of plant/animal disease and invasive non-native species
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"> • Valuing natural capital; • Trialling payment for ecosystem services; • Ecosystem service assessments; • Capacity of ecosystems to adapt to changes resulting from natural and human pressures in combination;

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