Cairngorms Nature Action Plan 2019 - 2024

Final Report



Cairngorms National Park Pàirc Nàiseanta a' Mhonaidh Ruaidh

Introduction

The largest protected area in the UK, the Cairngorms National Park is one of the best places in the country for nature. Nowhere else in Britain can you find such a collection of different habitats of such high quality and exceptional size and scale. It is where we find some of our wildest land, arctic-like mountain plateaux, a quarter of Scotland's native woodlands, the headwaters of four of Scotland's major rivers, functioning floodplains and the some of the last few remaining fragments of mountain woodland. Half of the National Park is designated as being of European importance for nature and over a quarter of the UK's rare and threatened species are found here.

Whether you're a visitor or a resident, 90% of people who come here feel deeply connected to the nature that surrounds them. With such an extraordinary place comes great responsibility to nurture, protect, and preserve this unique environment for generations to come.

That's where Cairngorms Nature steps in - a collaborative effort which unites a positive and highly productive partnership of over 40 organisations to protect and enhance the National Park's rich biodiversity. At the heart of this work is the Cairngorms Nature Action Plan, a guiding framework that helps focus conservation efforts, aligning with the broader National Park Partnership Plan and the Scottish Biodiversity Strategy.

The Cairngorms Nature Strategy Group, led by the Park Authority, plays a vital role in this mission. The team of conservation and land management professionals oversees the Action Plan's development, implementation, and evaluation, ensuring that each step we take is informed, impactful, and forward-thinking.

We have experienced significant changes since the 2019 - 2024 Action Plan was published. To address the climate and nature crises that have emerged in that time, we will need to build on the progress we've made over the last 5 years and act at unprecedented speed and scale going forward. This Final Report offers an opportunity to reflect on the successes and lessons we've learned and begin looking ahead to the future.

Image of a Falls of Truim by James Shooter Cover image of a Kentish Glory moth by David Whitaker

Landscape scale conservation

The Cairngorms Nature partnership has been working on large-scale conservation efforts to restore natural habitats and promote sustainable land use, while carefully balancing the needs of the environment, local communities, and the economy and navigating our changing climate, which creates challenges beyond our control.

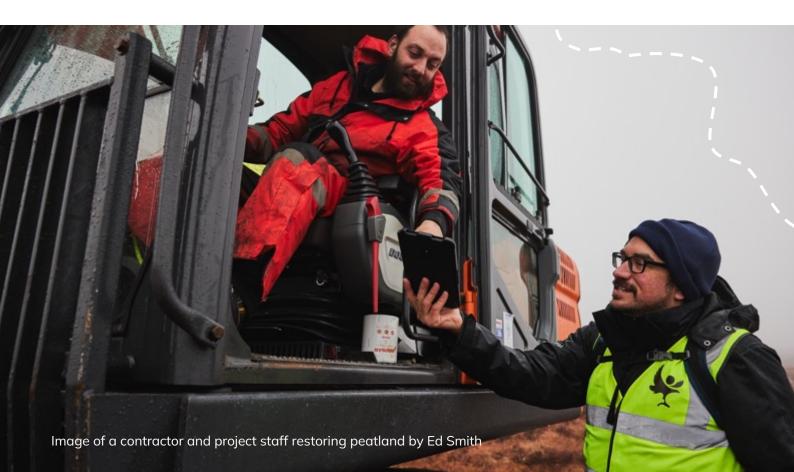
Highlights achieved by the partnership

- **Over 5,000 hectares of peatland has been restored**, trapping CO2, aiding species recovery, improving water quality and reducing flooding risk.
- **Native woodland cover has been increased over 6,000 hectares**, creating larger and more natural woodlands benefiting plants, insects, birds and mammals.
- Enhanced over 750 hectares of plantations on ancient woodland sites, creating more structurally diverse and biodiversity-rich woodlands.
- Over 1,000 hectares of habitat proactively managed for farmland waders, giving these vulnerable and culturally significant species more space to thrive.
- Woodlands and grasslands enhanced on 27 farms, increasing biodiversity and building resilience by joining up habitats and ecosystems.
- A network of over 50 wetlands has been created, enriching ecosystems, providing habitats for rare invertebrates and helping to mitigate the impacts of climate change.
- **Over 100 kilometres of river and riparian habitats have been restored**, reducing flooding risk and transforming waterways into wildlife corridors.



Achievements against targets

Target	Status
Woodland expansion	Green
5,000ha new woodland, including regeneration and montane	~ 6,000 ha of new woodland
Woodland expansion	Green
70% of new woodland to be native species	~ 95% native species
Woodland enhancement	Green
750ha PAWS and native woodlands under restoration	~ 750ha under restoration
Nature friendly farming	Green
20 farms in woodland and grassland projects	27 farms engaged
Nature friendly farming	Red
Increase in wader populations from the 2015 baseline	25% decrease - see overleaf
Peatland restoration	Green
5,000ha peatland under restoration management	~ 5,400 ha under restoration
Freshwater restoration	Amber
150km river and riparian restoration	~ 100 km restored
Freshwater restoration	Green
50 ponds created or restored, including SUDs ponds	~ 50 ponds created



Wader habitat expanded over 9,000 hectares

Image of a gamekeeper carrying our wader survey work by Ed Smith

Farmland wader conservation remains a priority despite wader populations not improving since the 2015 census. The Action Plan target to increase wader populations was set following a 16% increase in between 2000 and 2015, but from 2015 to 2021 the population has decreased by 25%. There are multiple factors affecting populations, for example the impacts of climate change and predation. Interactions can be difficult to pick apart and all or some may have contributed to the decline in varying degrees. Nevertheless, concerted efforts continue to counter this, with species including lapwing, redshank, curlew, snipe and oystercatcher all receiving critical, Park-wide support through the Action Plan.

The Strathspey Wetlands and Wader Initiative (SWWI) made significant progress working with the farming and crofting community to survey over 9,000 hectares along 130 km of the River Spey and its tributaries. The survey saw a standard methodology used across 65 sites, ranging from 10 to 500 hectares, covering land managed by 66 different landowners across 76 farms. The initiative saw widespread involvement, with 69 surveyors, 50 of whom were volunteers.

Through collaborative Agri-Environment schemes, 950 hectares of farmland in Strathspey are now proactively managed for waders, including the creation of 28 new wader scrapes. The work extends from over 70 applications for wader-specific management supported by the RSPB and the Park Authority through SWWI collaborations.

Similarly, the Grampian Wetlands and Wader Initiative (GWWI) has made significant strides, surveying 20 farms and managing 150 hectares for waders, including the creation of 11 wader scrapes. From 2018 to 2024, 27 applications for waderspecific management were supported by the RSPB and the Park Authority through GWWI collaborations.

In addition, the Park Authority directly contributed to habitat management by supporting softrak use, scrape creation, and cattle crossing installations, and teaming up with the Highland Wildlife Park and RSPB, installed 20 oystercatcher nesting platforms and assisted with wader surveys in the Angus Glens.



Over 100km of vital freshwater habitats restored Exciting freshwater restoration delivered through the Action Plan over the last 5 years has begun to transform the Cairngorms, with work underway across the Dee, Spey, and South Esk catchments, and for the first time, in the Don, restoring over 100 kilometres of river and riparian habitats and creating a network of over 50 wetlands.

River and wetland systems across the National Park are key to addressing many environmental issues, from flooding to biodiversity loss. Restoring these systems to their natural state and reconnecting them with their floodplains is increasing our resilience to climate change, improving water quality, creating larger flood buffer zones and helping to store excess water, whilst also providing essential habitats for wildlife to thrive.

The River Dee Trust has embarked on one of its most ambitious projects yet - restoring both the Clunie Water and its floodplain. Thanks to support from the Nature Restoration Fund, the Park Authority, Mossy Earth, the Woodland Trust, and the Cairngorms Trust, the project installed 97 large wood structures, 24 wader scrapes, 60 debris dams, removed two bridge piers, restructured 0.59 hectares of riparian woodland, and planted 10,000 native trees along the river.

The Dellifure Burn Project in the Spey Catchment, delivered through the Action Plan, is a brilliant example of river reconnection. By creating targeted breaches, the river now overflows onto grazing farmland during high flows, turning it into thriving wetland habitat for waders. The farmer still grazes his Aberdeen Angus cattle on the land, which helps manage the wetland. This innovative project was co-funded by the Park Authority and Macallan Distillery.

In the Angus Glens, the "Restoring the Esk" project, with a ± 1.4 million investment, is also beginning to restore 10km of river and 40 hectares of wetland in Glen Clova. Coupled with montane scrub restoration, this large-scale effort was inspired by smaller demonstration sites like Allt Lorgy, which paved the way for even bolder landscape projects. Crucially, the success of these initiatives hinges on the collaboration and support of local land managers and owners, making these ambitious restoration works possible.



Woodlands expanding over 6,000 hectares

Image of regenerating woodland by Mark Hamblin

Woodland expansion is joining up our existing woodlands, delivering biodiversity and landscape benefits, capturing and storing carbon dioxide, providing a sustainable source of timber, improving water quality and helping to reduce the risk of flooding.

The past 5 years have witnessed the expansion of woodland across the National Park by almost 6,000 hectares, surpassing the original 5,000 hectare target. One of the striking aspects of this reafforestation in the Cairngorms is just how much of it has been achieved using native species – around 95%. This focus on native species within woodland creation is unparalleled elsewhere in Scotland and has included the planting of many thousands of aspens, an important species for a range of dependent biodiversity rarely found outside the National Park.

Another distinctive feature of the woodland expansion achieved through the Action Plan is the high proportion, around a third, that has been delivered through natural regeneration, most of it unfenced. This has been made possible by managing deer populations through culling to levels that significantly reduce the risk of browsing for young trees.

Much of the landscape in and around the mountainous core of the National Park has been managed principally for ecosystem restoration in the presence of low deer densities for several years now. The thousands of hectares of natural regeneration and planting there, not only of Scots pine, but also of various native broadleaves, including palatable species such as rowan, aspen and willows, is seeing woodland expand both outwards and upwards. The development of mountain woodland and a more natural treeline is underway on landholdings including Mar Lodge, Wildland, Abernethy and Cairngorm Mountain, with Scots pine and juniper marching uphill naturally, while underrepresented downy birches and mountain willows have been given a helping hand by being planted at higher elevations.



Image of montane woodland by Mark Hamblin

Focused action for priority species

The Cairngorms National Park is a stronghold for nearly 1,200 species of national or international importance and species protected under the Wildlife and Countryside Act. While ecosystem restoration is vital for long-term sustainability, we must also focus on protecting vulnerable species now, ensuring they get back on a sustainable footing, less reliant on targeted action and recovering within a network of interconnected habitats.

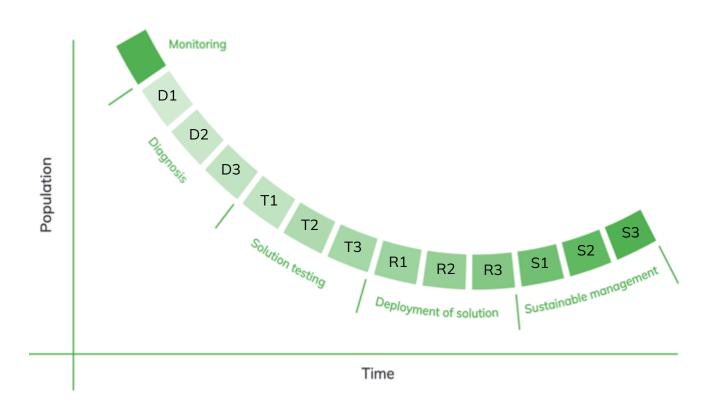
Over the past 5 years, the Cairngorms Nature partnership has been driving targeted action to help some of our rarest species make meaningful strides toward recovery.

Highlights achieved by the partnership

- Pioneering reinforcement and reintroduction programmes for pine hoverfly, dark bordered beauty, wildcat and beaver, restoring biodiversity in the National Park.
- Successful delivery of the Cairngorms Rare Plants Project and the Cairngorms Capercaillie Project, taking action to protect the rarest of our plant and bird species.
- River restoration improving habitat for endangered freshwater pearl mussel populations in all catchments in the National Park.
- **Curlew habitat restoration at a network of key sites**, helping these iconic birds to recover across the Cairngorms.
- **Protection and expansion of aspen**, safeguarding these stand out trees which other endangered species also depend on.
- **Co-ordinated monitoring of mountain hare populations**, enabling sustainable management at a landscape scale.
- **Raptor Officer recruited to drive forward the Cairngorms Raptor Project** and increase the home ranges and breeding success of our protected raptors.

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Figure 1: Species Recovery Curve



Achievements against targets

Priority species, actions and targets	Progress and overall status
 Wildcat Actions: Promote TNVR, reduce hybridisation, disease and misidentification, and trial captive-bred wildcat releases. 2019 species recovery curve position: T1 Target position: R3 	Amber (significant progress toward target) All actions underway, including captive- bred wildcat releases. Significant progress along recovery curve from T1 to R1 with work ongoing.
 Mountain hare Actions: Collaboration on population monitoring and management across ownership boundaries. 2019 species recovery curve position: D3 Target position: S1 	Green (target achieved) Collaborative population surveys and monitoring now in place to enable sustainable management at a landscape scale. Recovery curve position progressed from D3 to S1.

 Beaver Action: Plan proactively for beaver populations in the National Park. No recovery curve target. 	Green Reintroduction underway and year 1 complete. Current species recovery curve position R2.
 Capercaillie Actions: Coordinate management solutions and deliver NLHF funded Cairngorms Capercaillie Project to reduce impact of recreational disturbance. 2019 species recovery curve position: T1 – T3 Target position: R3 	Amber NLHF project delivered reducing impact of recreational disturbance at key sites and greater coordination of management. Recovery curve position progressed from T1 to R1 with deployment of solutions ongoing.
 Curlew Actions: Assess upland breeding productivity, monitor nests, and create sensitivity maps for curlew sites. 2019 species recovery curve position: D2 Target position: T1 	Green Upland surveys and hotspot mapping undertaken to inform ongoing habitat improvement. Exceeded target, progressing from D2 to T2.
 Raptors (all species) Actions: Collaboration on population monitoring and positive management, wildlife crime enforcement and wildlife tourism opportunities. 2019 species recovery curve position: T2 Target position: R3 	Amber Raptor Officer recruited. Work underway to establish baseline populations, identify unoccupied territories, undertake collaborative mapping and monitoring and reduce illegal killing. All species of raptor remain at T2 as work ongoing.
 Kentish Glory Actions: Surveying and mapping habitat and working with landmanagers and volunteers. 2019 species recovery curve position: T1 Target position: R1 	Amber The Rare Invertebrates in the Cairngorms (RIC) Project enabled delivery of all relevant actions. Progress made from T1 to T2 with work ongoing.
 Dark bordered beauty Actions: Surveying and mapping habitat, captive breeding and translocation programmes, working with landmanagers and volunteers. 2019 species recovery curve position: T1 Target position: R1 	Green The RIC Project enabled delivery of all actions, achieving significant progress along the recovery curve from T1 to R1.

 Pine hoverfly Actions: Surveying and mapping habitat, captive breeding and translocation programmes, working with landmanagers and volunteers. 2019 species recovery curve position: R1 Target position: R2 	Amber The RIC Project enabled delivery of all actions including a trial captive breeding and release programme. The programme is still ongoing, so the current position on the recovery curve is T3 (solution testing).
 Northern silver stiletto fly Actions: Surveying and mapping habitat and working with landmanagers and volunteers. 2019 species recovery curve position: D2 Target position: R1 	Amber The RIC Project enabled delivery of all relevant actions. Progress made from D2 to D3 with work ongoing.
 Shining guest ant Actions: Surveying and mapping habitat and working with landmanagers and volunteers. 2019 species recovery curve position: D2 Target position: R2 	Amber The RIC Project enabled delivery of relevant all actions. Progress made from D2 to D3 with work ongoing.
 Scabious mining bee Actions: Surveying and mapping habitat and working with landmanagers and volunteers. 2019 species recovery curve position: D2 Target position: T3 	Amber The RIC Project enabled delivery of all relevant actions. Progress made from D2 to T1 with work ongoing.
 Northern damselfly Actions: Surveying new and historic sites with volunteer support, and habitat management advice for land managers. 2019 species recovery curve position: D2 Target position: T2 – T3 	Green National Park-wide survey undertaken and habitat management and creation ongoing at key sites. Progressed from D2 to T3.
 Northern February red stonefly Actions: National Park-wide survey and awareness raising awareness of species' needs. 2019 species recovery curve position: D2 Target position: D3 	Green National Park-wide survey undertaken and awareness raising ongoing with land managers and planning authorities. Progressed from D2 to D3.

 Aspen hoverfly Actions: Sustainable management suitable for population expansion and integrate with wider work for aspen woodland. 2019 species recovery curve position: T2 Target position: R3 	Amber Survey work undertaken, engagement with land owners and integrated into beaver monitoring programme. Progress made from T2 to R1 with work ongoing.
 Wood ants Actions: Safeguard existing populations, integrate with wider woodland work and investigate translocation opportunities. 2019 species recovery curve position: T1 Target position: R2 	Amber Data collection and translocation feasibility work underway. Progress made from T1 to T3 with work ongoing.
 Pinewood mason bee Actions: Develop strategy for incorporating species' needs into forestry management. 2019 species recovery curve position: D2 Target position: T2 	Red (target not achieved) Targeted survey work undertaken to understand species distribution and status. No movement from D2 but work ongoing.
 Freshwater pearl mussel Actions: Improve riparian management, survey suitable habitat and support a reintroduction / translocation project. 2019 species recovery curve position: R1 Target position: R2 	Amber Targeted habitat improvement and extensive survey work undertaken. Survey data informed recovery plan including population reinforcement project. Position remains R1 with work ongoing.
 Aspen Actions: Manage and improve conditions of key sites, improve connectivity, create new aspen stands and develop a Deeside Aspen Management Plan. 2019 species recovery curve position: R1 Target position: R3 	Green Survey work and mapping undertaken to identify extent of aspen woodland. Targeted management at priority sites ongoing. Aspen Officer in post to develop strategic aspen network plan. Progressed from R1 to R3.
 Marsh saxifrage Actions: Monitor existing populations and provide advice and support for land managers. No recovery curve target. Monitoring only. 	Green The Cairngorms Wild Plants Project enabled delivery of all actions. Current species recovery curve position T3.

 Waxcaps Actions: Monitor existing populations and provide advice and support for land managers. 2019 species recovery curve position: D3 Target position: T2 	Green The Cairngorms Wild Plants Project enabled delivery of all relevant actions. Recovery curve position progressed from D3 to T2 with work ongoing.
 One-flowered wintergreen Actions: Monitor existing populations, provide advice and support for land managers, and identify translocation sites in the National Park. 2019 species recovery curve position: T1 Target position: T3 	Green The Cairngorms Wild Plants Project enabled delivery of all actions, including a successful translocation. Recovery curve position progressed from T1 to T3 with work ongoing.
 Twinflower Actions: Monitor existing populations, provide advice and support for land managers, and identify translocation sites in the National Park. 2019 species recovery curve position: T2 Target position: T3 	Green The Cairngorms Wild Plants Project enabled delivery of all actions. Target exceeded. Recovery curve position progressed from T2 to R3.
 Alpine blue sow thistle Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: T2 Target position: R3 	Green Populations monitored and research conducted as required. Translocations and work with land managers ongoing. Recovery curve position progressed from T2 to R3.
 Oblong woodsia Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: D2 Target position: T3 	Green Populations monitored and research conducted as required. Translocations and work with land managers ongoing. Recovery curve position progressed from D2 to T3.
 Small cow wheat Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: D3 Target position: T3 	Green Populations monitored and research conducted as required. Translocations and work with land managers ongoing. Recovery curve position progressed from D3 to T3.

 Wooly willow Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: R2 Target position: R3 	Amber Work begun to monitor populations, translocations undertaken, and further receptor sites identified. Recovery curve position progressed from R2 to T3 with work ongoing.
 Alectoria ochroleuca Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: D2 Target position: T3 	Red Work begun to monitor populations with further work needed. Recovery curve position remains D2.
 Hertelidea botrvosa Actions: Monitor populations, research causes of decline, undertake translocations, and provide support and advice for land managers. 2019 species recovery curve position: D2 Target position: T3 	Amber Work begun to monitor populations, dispersal and identify opportunities for translocations. Recovery curve position progressed from D2 to T2 with work ongoing.



Rare plants accelerated towards recovery

Image of twinflower by Mark Hamblin

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Recognised as an Important Plant Area, the Cairngorms are globally significant for their wild plant populations, but these crucial habitats and species are rapidly disappearing, putting the Cairngorms' unique plant heritage at serious risk.

In response, Plantlife launched the Cairngorms Rare Plants and Wild Connections project in partnership with the Park Authority and NatureScot. With £360,000 secured from the National Lottery Heritage Fund, this ambitious project targeted three rare species within the Action Plan - waxcap, one-flowered wintergreen, and twinflower along with species-rich grasslands. Over the last 5 years, the project has significantly advanced the recovery of twinflower and oneflowered wintergreen, far exceeding initial expectations and bolstering their resilience.

At the heart of the initiative was empowering people to take action. By harnessing the enthusiasm of volunteers and citizen scientists, Plantlife aimed to restore the rarest plant populations across the Cairngorms and improve understanding and management of vulnerable habitats. The project provided direct conservation support to landowners and communities, helping restore waxcap habitats and species-rich grasslands, while also building volunteer capacity for survey work and fostering deeper community engagement.

Numerous partners, including the Royal Botanic Gardens Edinburgh and significant landowners, contributed to the project. Volunteers played a critical role, gaining skills, sharing knowledge, and benefiting from the experience while contributing to the overall success.

Despite challenges, including the pandemic, the project adapted flexibly, evolving from its original plans to remain effective and fit-forpurpose. Key achievements included the world's first successful introduction of one-flowered wintergreen, ground-breaking research on its fungal associations, and the creation of ten new twinflower populations. Volunteers also pioneered innovative techniques to gather data from remote mountain habitats, leading to the discovery of a new fungal species and two new UK fungi records.

The project has left a lasting legacy, improving plant and fungi populations, raising awareness of the Cairngorms' natural heritage, and advancing the recovery of its most precious species and habitats. Lost species returned to their environment Once a native species, beavers were hunted to extinction in the UK over 400 years ago, but now, they are making a remarkable comeback. Their reintroduction to the Cairngorms National Park represents a significant step in the ongoing efforts to restore balance to the landscape, providing benefits to both nature and people.

Beavers are often referred to as "nature's engineers" for their ability to transform ecosystems. By building dams and creating wetlands, they improve water quality, reduce flooding, and increase biodiversity. Their activities create habitats that support a wide range of wildlife, including fish, birds and invertebrates. In the National Park, the industrious mammals are already playing a vital role in enhancing the health and resilience of river systems.

The beaver reintroduction programme in the Cairngorms is not just about conservation but also about inspiring and involving local communities. Land managers, farmers, and residents have been actively engaged in the project, ensuring that beaver reintroduction is carried out in a way that supports sustainable land use and addresses any concerns. This collaborative and award-winning approach is crucial to ensuring that beavers become a positive force in the landscape, benefitting both the environment and the people who live there.

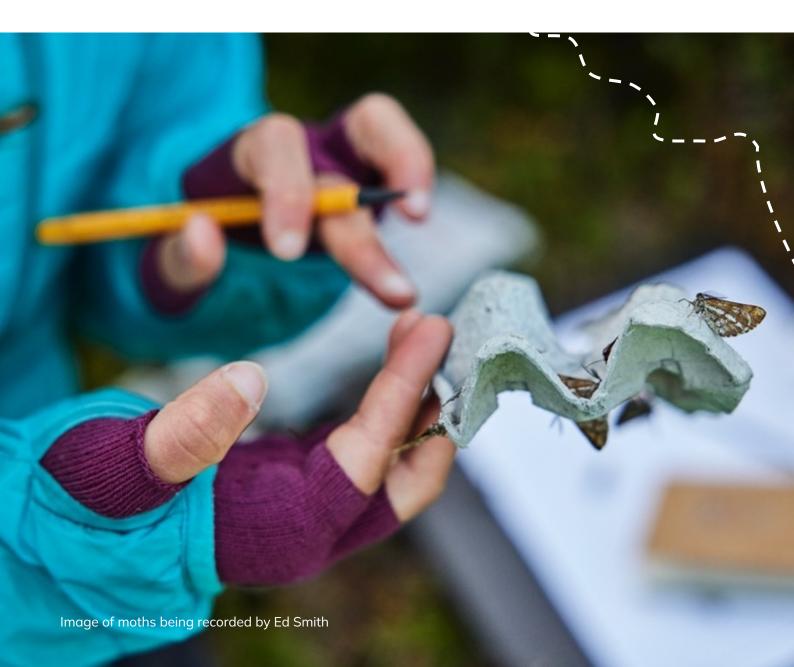
As beavers settle into the Cairngorms, they are becoming a symbol of Scotland's bold vision for a wilder, more resilient future. Their presence brings hope that, with the right care and stewardship, we can restore the balance between human activity and the natural world, leaving a lasting legacy for generations to come.

Involving people

Over the last 5 years, activities delivered through the Action Plan have been engaging, inspiring and encouraging local communities and communities of interest to value and care for nature, be proud of the conservation work in the Cairngorms and want to do something to protect and enhance their natural heritage.

Highlights achieved by the partnership

- 86 volunteer rangers have been recruited and are working across the National Park, enabling more residents and visitors to learn about and enjoy nature responsibly.
- Over 7,000 residents and visitors have been engaged in outdoor, nature-related events, building knowledge, understanding and connections with nature in the National Park.
- 7 communities and nearly 400 residents and visitors have been shaping decision-making processes about land use in the National Park, to enable wider involvement in future.



Achievements against targets

Target	Status
Opportunities to get involved Over 50 volunteer rangers working in Cairngorms National Park.	Green 86 volunteer rangers recruited.
Community engagement	Green
5 communities fully engaged in landscape	7 communities engaged as part of the
values project and land-use decision making	Cairngorms 2030 development phase.
Community engagement	Amber
20 land managers trained in community	Work superseded by national programme of
engagement.	activity led by Scottish Land Commission.
Public engagement	Amber
15,000 people attended outdoor, nature-	7,000 people attended. Restricted due to Covid-
related events.	19 pandemic.

Empowered over 7,000 people to play their part

Image of a volunteers monitoring raptors by Charlotte Milburn

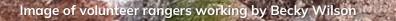
The Cairngorms Nature Festival 2023 was a vibrant, 10day event in May that engaged a wide range of people and partners, significantly building on its previous iterations. Involving 165 activities across 86 distinct events, the festival celebrated the National Park's unique natural heritage, bringing people together through culture, arts, and nature-based experiences. It successfully engaged 62 partners, a 24% increase from 2022, showcasing strong collaboration across a broad spectrum of partners, including conservation organisations businesses and community groups.

A key feature of the 2023 festival was its broadened scope, designed to prevent clashes and enable wider attendance. Notably, it extended across two weekends and a regular working week. This allowed for a focus on public events during the weekends, while mid-week activities were directed towards historically excluded groups, schools, and visitors.

The festival drew diverse audiences with a mix of familyfriendly and adult events, 51% of which were free, making the festival highly accessible. There was a concerted effort to accommodate various needs, including providing 31 wheelchair-accessible events.

The festival hosted a successful art competition, involving 15 schools and culminating in a Grand Prizegiving Ceremony attended by over 110 people at Mar Lodge Ballroom. Other key flagship events included volunteering activities and a Mountain Bothy Film Festival, which further boosted the festival's profile.

The Cairngorms Nature Festival 2023 was a significant step toward achieving its vision of becoming a globally recognised festival, connecting people with the unique nature of the Cairngorms and fostering a strong community around conservation efforts in the National Park.



Reflections

What have we learnt?

1. Adaptability and progress

Most actions in the plan (79%) were completed, with several others nearing completion. In many cases, those nearly completed actions still represent significant and hard-won progress. For example, when new knowledge surfaced about some of our elusive rare species this made the agreed actions impractical, but swift adaptation of the work still ensured continued progress along the recovery curve.

2. Alignment and ambition

The successful achievement of 75% of the landscape-scale conservation targets, many of which were surpassed, indicates that there is potential to be more ambitious in the next Action Plan. The next plan will be a key mechanism for delivering the new National Park Partnership Plan and Scottish Biodiversity Strategy. Both strategies are aimed at tackling the twin crises of climate change and biodiversity loss and offer opportunities to set appropriately challenging targets.

3. Species cohort approach

The new National Park Partnership Plan aims to drive systemic change. Grouping species into cohorts in the next Action Plan, instead of continuing to focus on individual target species may better support this aim. For example, combining all farmland species could facilitate outcomes and bigger ambitions like recovering species abundance and diversity within the farmed landscape. Implementing actions in the plan for individual target species often relied on small teams of technical staff where absences, for example due to illness, disproportionately affected progress. Grouping species into cohorts could help mitigate these impacts.



4. Recovery metrics

Of the 29 target species in the plan, 23 (79%) have made progress along the recovery curve (Fig. 1). In comparison, England's 'Back from the Brink' joint species recovery programme targeted 112 species. By the end of the five-year programme in 2022, progress along the recovery curve was reported for 96 species (85%), with informed estimates suggesting that 33 more species will show further progress in the next five years. The 'Back from the Brink' programme brought together 100 organisations, led by Natural England and the seven NGOs that comprise Rethink Nature. A key recommendation from the programme is to combine species recovery curves with appropriate outcome measures to assess range-level recovery progress and overall success. The Cairngorms Nature Index offers an opportunity to implement this approach in future.

5. Measurability

Assessing progress against some targets in the plan required large amounts of complex data, or complex analysis, whilst others were more forgiving. As this presented challenges for some partners, there is an opportunity in the next plan to ensure all targets are measurable relative to the resource available.

6. Progress evaluation

Reporting the extent to which each priority species action has been achieved, rather than just noting a single point on the recovery curve, could be more effective for a short-term plan, especially for target species with complex life cycles or significant knowledge gaps, but where progress in 5 years is still possible. Including a supporting narrative and an assessment of confidence in the scoring - particularly when not based on quantitative population data - would also be a valuable addition.

7. Adaptive management

Despite delivering significant positive conservation actions, some targets in the plan were not met due to shifting baselines. For instance, the current capercaillie population estimate is 52% lower than the estimate used to set the original target. This highlights the need for a more dynamic and adaptive approach in the next plan to incorporate new knowledge and information as it becomes available.

8. Empowering communities

The Cairngorms Capercaillie Project, delivered as part of the plan, has demonstrated that engaging and empowering a large and diverse partnership of groups and individuals not normally engaged with conservation *per se* is a powerful way and more sustainable approach to conservation than reliance on land managers, charities and public agencies. An opportunity exists to explore ways in which more communities could be empowered to deliver actions in the next plan.

9. Partnership working

The successful delivery of actions in the plan hinged on effective collaboration with a wide range of partners. Evaluating this partnership working - what went well and what could be improved - would help inform the development of the next plan.



