



Wild PARK



**National Park
Biodiversity Action Programme
2018-2023**

Contents

Contents	2
Foreword from James Stuart.....	3
Executive Summary	4
Wild Park 2020.....	5
Wild Challenge Action Plans	5
Project List	5
Tackling Key Environmental Threats.....	6
Poor Quality of Lochs and Rivers	7
Unsustainable Grazing Impacts	10
Invasive Non-Native Species	12
Climate Change Pressures	19
Appendix: Wild Park Project List	21

Foreword from James Stuart

The habitats and wildlife of the Loch Lomond & The Trossachs National Park are key to its success and popularity. The natural capital that the National Park provides underpins the social and economic value of the area, so it is vital that we protect and enhance it.

The National Park is a landscape which has been moulded not only by natural forces for millennia, but by generations of land managers, with both negative and positive impacts on our wildlife. It is therefore vital that we work with those who manage the land to ensure that we balance viable land use businesses, such as farming and forestry with creating more diversity and a landscape that is richer in nature, which continues to be internationally recognised and celebrated.

Wild Park is the biodiversity action programme for Loch Lomond & The Trossachs National Park and is the main delivery vehicle for our nature conservation work. It sets out the key environmental threats to our natural environment and how, by working with our delivery partners and others, we intend to tackle these. This will allow habitats to recover, the wildlife which they support to thrive and ecosystems to become more resilient to climate change. This will in turn drive an even greater range of economic, cultural and other benefits for generations to come.

Wild Park is also a long-term programme; we intend to focus for the coming years on the key threats which are currently having the biggest impact on our National Park. It will evolve as time goes on and will adapt to the dynamic environment in which we operate. It is a plan that we want people to know about, to value and to get involved in, and by doing so have a hand in shaping our collective natural legacy for the future.

James Stuart

Convener

Loch Lomond & The Trossachs National Park Authority

Executive Summary

Wild Park is the biodiversity action programme for Loch Lomond and The Trossachs National Park. First produced in 2014, the original plan, Wild Park 2020 set out a vision and a series of outcomes associated with protecting and enhancing biodiversity, along with five 'Wild Challenges', which were focuses for awareness raising and action.

Wild Park is delivered in partnership with the public, private and third sectors and is a commitment to delivering Scotland's international 'Aichi' obligations on the conservation of biodiversity as set out in the [Scottish Biodiversity Strategy](#).

The programme has been reviewed to update its strategic and operational position, particularly in relation to National Park Partnership Plan 2018-23 priorities and targets. To date 65% of the original projects have been completed or are in progress.

The new, refreshed Wild Park further raises awareness of the importance that our natural capital plays in underpinning economic and social wealth in the National Park, and re-focuses action around tackling the Key Environmental Threats which affect the National Park's biodiversity and natural environment. These Threats are:

- Human activities that lead to poor quality of some lochs and rivers, such as pollution and erosion from adjacent land use;
- Unsustainable levels of grazing from livestock and wild mammals, which reduces woodland and natural vegetation cover;
- Invasive, non-native species which have no natural control and displace native biodiversity;
- Climate change pressures which are rapidly changing the ancient patterns of nature.

The existing 'Wild Challenges' will be changed to reflect these threats and raise awareness of them and the need for collective action. There will be a new Wild Park Steering Group with an independent chair that will help to maintain a strategic overview of the development and delivery of actions and targets, and Working Groups to focus on tackling the Threats; a dedicated Wild Park Officer post; and the inclusion of private land management and community delivery partners.

Individual action plans for the Threats are listed, including priority areas for geographic focus of delivery over 2018-23 and a list of projects under the four threats have been provided to show the breadth of projects that come under the Wild Park banner.

Wild Park 2020

Wild Park 2020 is the biodiversity action programme for the Loch Lomond & the Trossachs National Park. It is the main delivery vehicle for nature conservation work by the National Park Authority, in conjunction with a variety of delivery partners.

Wild Park 2020 set out a vision and 25-year outcomes and has accomplished many biodiversity wins since its inception. We wish to continue this positive momentum by evolving and refocusing the Action Plan to help deliver the vision and targets for conservation and land management set out in the Partnership Plan. This will be best done by focussing efforts on tackling the 'Key Environmental Threats' to biodiversity and natural capital in the National Park. The following Action Plan sets out our focus until 2023.

Wild Challenge Action Plans

The Wild Challenges are an effective media tool and a focus for action, therefore the decision was made to continue the format focusing on the Key Environmental Threats (although how we term these challenges may change). This document sets out the objectives, indicators of success and geographic focus for the four threats and provides a framework for the continuation and development of projects that will allow us to tackle the threats.

Wild Park Project List

The Project List holds the detail of how we are going to achieve the objectives set out in the Action Plans below. It shows the delivery partners involved, the resources committed and required and the intended timescales.

A summary of the projects can be found in the Appendix.

Tackling Key Environmental Threats

The health of an ecosystem or habitat is fundamental to their function and the benefits that they can provide. The natural environment of the National Park faces many threats, mostly resulting from human impacts or resulting pressures, but four environmental threats are considered to be the key pressures on the National Park's biodiversity and natural capital. These threats are also recognised at a national level¹. They are:

➤ **Poor quality of some lochs and rivers**

Negative impacts on freshwater and marine water bodies from problems such as pollution from surrounding land uses.

➤ **Unsustainable levels of grazing**

Unsustainable levels of wild and domesticated grazing and browsing animals in some upland and woodland areas, leading to reduced tree cover and the erosion of soils, which are important carbon stores.

➤ **Invasive non-native species**

The spread of invasive non-native species, which displace our rich native wildlife.

➤ **Climate change pressures**

The impacts of climate change leading to warmer, wetter weather patterns and a subsequent increase in flood events, major landslides and rapid shifts in natural ecosystems.

Tackling these threats must be a collective priority; our aim is to work towards overcoming these threats and achieving a vision of improving ecosystems, in order to create a more sustainable long-term future for both people and nature.

Each Key Environmental Threat is outlined in further detail with the objectives and indicators of success to achieve by 2023. The geographic focus of efforts are also listed. Where appropriate, designated sites will be prioritised for action, as these are our most important sites for biodiversity. In these areas, conservation effort will focus on actions which tackle sites or features that are classed as being in unfavourable or deteriorating condition. To support delivery, working groups will be set up to focus on each of the threats identified. The purpose of these groups will be to encourage partnership working and information sharing between the National Park Authority, key delivery partners and the local community.

¹ <https://www.gov.scot/Publications/2015/06/8630> - Pages 8-9 The Route Map sets out the priority work over the next five years to help us deliver the '2020 Challenge for Scotland's Biodiversity' to meet the international Aichi Targets for biodiversity. Action is co-ordinated into six 'Big Steps for Nature', under which priority projects are identified which focus on delivering benefits for biodiversity.

Poor Quality of Lochs and Rivers

There are 92 river and loch water bodies that fall completely or partially within the Loch Lomond & The Trossachs National Park and the five coastal water bodies which partially border the National Park.

Freshwater

The major river systems in the National Park are the Tay, Forth & Teith and Lomond catchment. There are also many small burns and rivers draining directly into the coast and narrow sea lochs on our western edge. They all provide a wide variety of wildlife habitats both in-stream and marginal, and can act as important wildlife corridors. As well as providing an important biological resource, they influence the characteristics of the surrounding landscape, supply water for domestic, agricultural and industrial use and provide opportunities for recreation.

Their ability to function as a vital part of National Park ecosystems is affected by many different pressures, such as pollution from surrounding land uses including agriculture and forestry operations (felling and roading), bank erosion control measures, flood defences and alterations to improve drainage so their ability to adapt to changing conditions is often much reduced. The restoration and enhancement of degraded waterbodies and peatlands, in order to aid their water and carbon storage natural functions, is highly important, as is their role as major sources of drinking water and hydro-electricity generation.

The Scottish Environment Protection Agency (SEPA) produces an annual Water Framework Directive (WFD) Classification for all the water bodies in Scotland. Currently 44% of waterbodies within the National Park have been given the status of either high or good overall² condition by SEPA which is below the national average of 62%.

There are healthy populations of species such as Atlantic salmon, river lamprey and otter. A number of physical barriers such as weirs are present in the Teith and Loch Lomond catchments, which are currently preventing or delaying migration of species such as Atlantic salmon and river lamprey to their spawning habitats. There are fragmented populations of water vole present in the National Park; however the Trossachs Water Vole Project, which has had notable successes over the last 10 years following re-introductions, has seen the species spread its range.

Stretches of several rivers within the National Park are designated or lie within designated sites, such as the River Tay SAC, River Teith SAC, Endrick Water SAC and Loch Eck SSSI.

Objectives by 2023

- Improve water quality by reducing point source and diffuse pollution.
- Improve habitat quality, particularly focussing on riparian habitats to provide natural flood management, improve ecology and climate change benefits.

² Overall Condition – includes five categories and is based on measurements of chemistry, hydrology (changes to water levels and water flows) morphology (changes to the beds, banks and shores of water bodies) and assessment of invasive non-native species (INNS).

- Explore opportunities to demonstrate benefits of natural flood management in Strathard.
- Enable fish to access rivers by adapting artificial barriers.
- Improve quality of water environment by carrying out river bank protection, restoration, re-connecting and re-watering back channels on targeted rivers.
- Monitor current health of riparian and aquatic species populations.
- Deliver education in schools and communities to highlight aquatic biodiversity and water quality.
- Plant riparian woodland to enhance aquatic ecosystems, cooling, strengthen woodland habitat networks, and help manage flooding.
- Raise awareness to the health and recreation benefits of improved water quality.

Indicators of success by 2023

- Increase the percentage of freshwater water bodies achieving at least good ecological condition from the 2016 baseline of 44% to 59% by 2023.

Geographic focus

We will concentrate on the areas where we can have an impact on the condition by changing land management practices and where SEPA has the condition set as being Moderate, Poor or Bad, such as Lochan Larig SSSI (Glen Ogle) and Lake of Menteith SSSI.

Designated sites will be a key focus.

Working group

- Argyll Fisheries Trust
- Forestry & Land Scotland
- Forth Rivers Trust
- Land Manager Representative
- Loch Lomond & The Trossachs National Park
- Loch Lomond Fisheries Trust
- SEPA

Marine

The Cowal area of the National Park includes 39 miles of coastline around three sea lochs: Loch Long, Loch Goil and the Holy Loch. Upper Loch Fyne and Loch Goil, some of which is in the National Park, are Marine Protected Areas.

This marine environment within the National Park includes the intertidal zone and is extremely rich in biodiversity. The National Park coastline has a range of habitats including rocky shores, cliffs, small areas of salt marsh and mudflats rich in marine invertebrates, which in turn support a range of wading birds and also provide great opportunities for people who live and visit the area to enjoy the wildlife found along the seashore and in marine waters.

Objectives by 2023

- To raise awareness of marine litter and pollution affecting the National Park's coastal environment and communities.
- To produce and begin implantation of a strategic plan that addresses how to tackle the problems with marine litter and pollution in the Sea Lochs of the National Park.

Indicators of success by 2023

- Increase the number of National Park Authority/Marine Conservation Society beach clean litter picks using volunteers and community members.
- Identify one further Beachwatch beach within the National Park.
- Identify organisers for Beachwatch surveys and clean ups for all Beachwatch beaches within the National Park.
- Increase the number of businesses, organisations and communities within the marine environment of the National Park engaged with the issues of marine litter and pollution.
- Develop National Park Litter Prevention Action Plans and Community Litter Prevention Action Plans (as appropriate).
- Encourage outreach and education initiatives in communities and schools as a means of preventing the creation of litter.

Geographic focus

The coastline around the three sea lochs: Loch Long, the Holy Loch and (upper Loch Fyne and) Loch Goil Marine Protected Area (MPA).

Where appropriate, designated sites will be a key focus.

Working group

- Clyde Marine Planning Partnership
- Loch Lomond & The Trossachs National Park Authority
- Marine Conservation Society
- Marine Scotland
- SEPA
- GRAB Trust

Unsustainable Grazing Impacts

On our moorlands and in our woodlands, domesticated and wild herbivores, including sheep, cattle, deer and feral goats are widespread. As well as being central to the land management economy, they are also part of the National Park's cultural and natural heritage. Unsustainable levels of wild and domesticated grazing animals in upland and woodland areas can however lead to loss of species in the ground flora, simplified woodland structure without shrubs or climbing species, reduced tree cover and the erosion of soils, which are important carbon stores.

The condition of habitats outside of upland Designated Sites is largely unknown and SNH has been working with Deer Management Groups to collect data to assess the level of herbivore impacts on habitats, such as dwarf shrub heath and blanket bog.

There are 37 out of a total of 67 sites (some of them overlapping, i.e. SSSIs and SACs) where the designated features are under pressure from over grazing. But there are also five sites where designated features are under-grazed proving that this is a complex issue that needs careful collaborative management.

The Native Woodland Survey of Scotland (NWSS) published in 2014 identified the level of herbivore impacts within native woodlands. A low or medium level of herbivore impact is natural and required for sustainable woodland ecosystems and a low level of impact indicates natural regeneration is unlikely to be inhibited by herbivores and in general this is the ideal level of optimum long-term woodland condition.

Within the National Park there are 5,787 ha (NWSS 2014) of native woodland of which 5,063 ha has some herbivore impacts recorded. In the table below, the level of impacts recorded in the National Park is compared with the national (Scottish) average.

Herbivore Impact Category	National Park	Scotland
Low	3%	14%
Medium	60%	53%
High	17%	13%
Very High	21%	20%

A sustainable woodland ecosystem requires herbivore impacts to be in the low and medium categories; the national average is 67% in these two categories. The woodlands within in the National Park fall below this average at 63% demonstrating a higher level of unsustainable grazing compared to the national level.

Objectives by 2023

- Work with Deer Management Groups to gain a greater understanding of the wild herbivore grazing pressures throughout the National Park.
- Increase the number of land managers involved in habitat impact assessments and use this data to inform management decisions.
- Decrease the number of designated sites with the pressure recorded as over-grazing from wild or domesticated herbivores, to be monitored via Herbivore Impact Assessments (Site Condition Monitoring) in future.

- Decrease the percentage of native woodlands with High or Very High NWSS Herbivore Impact categories.
- Improve upland and woodland condition by supporting rural businesses to achieve viable and sustainable grazing livestock levels through targeted land management advice and support in accessing the Scottish Rural Development Programme or equivalent.
- Improve knowledge exchange with land managers, highlighting the damage that over-grazing can do to habitats, so that land managers know why they are being asked to do particular management.

Indicators of success by 2023

- Park-wide habitat impact assessments occurring in upland and woodland habitats.
- Number of native woodlands in the high and very high herbivore impacts categories reduced or management in place to ensure there will be a reduction in impacts.
- Reduction in the number of upland designated sites within the National Park that are in unfavourable condition as a result of grazing.

Geographic focus

Areas with designated sites under pressure from over grazing, such as Ben Lomond SSSI, Meall na Samhna SAC and Conic Hill SSSI, and woodlands with High or Very High NWSS Herbivore Impact categories, such as the woodlands around Loch Lomond SAC, Coille Coire Chuilc SSSI, in Balquhiddier Glen and on the south side of Loch Earn (and the areas in between). Herbivore management will also be an important element in the implementation of the Greater Cononish Glen Management Plan.

Designated sites will be a key focus.

Working group

- Deer Management Groups and/or Land Manager Representative
- Forestry & Land Scotland
- Loch Lomond & The Trossachs National Park Authority
- National Trust for Scotland
- RSPB
- Scottish Rural College
- SNH
- Woodland Trust Scotland

Invasive Non-Native Species

The National Park has several botanical and mammalian invasive non-native species (INNS) which are having an adverse impact on our native biodiversity. The species that are being targeted for control include:

- Invasive rhododendron
- Riparian: Japanese knotweed, Himalayan balsam, giant hogweed and American skunk cabbage
- Mammalian: Grey squirrel and North American mink

Rhododendron

The presence of invasive rhododendron is a major cause of designated native woodlands being classified as in unfavourable condition within the National Park – there are 35 designated sites (some of them overlapping, i.e. SSSIs and SACs) with designated features that are affected by invasive species. Ten³ of them have rhododendron present that affects the favourable status of the site.

Rhododendron, if left untreated, can inhibit the growth of all vegetation growing beneath its canopy, and eventually out-compete nearly all native tree and shrub regeneration. It casts dense shade and produces poor quality leaf litter, impacting on water quality and reducing invertebrate abundance. Re-colonisation with native species after removal of rhododendron is slow, resulting in a loss of native biodiversity and therefore the value of the woodland.

The NWSS in 2014, stated that the National Park had 5,787 ha of native woodland, with an estimated 7% (396 ha) being adversely affected by the presence of rhododendron. This may seem a small percentage, however, the task is a large and difficult one and key to controlling rhododendron is colony scale control which is co-ordinated, if required, over multiple land holdings.

Objectives by 2023

- Active management of Rhododendron in all ten designated sites by 2023.
- Expand control of rhododendron to create a buffer zone to protect all areas under current active management, such as designated sites.
- All sites within the National Forest Estate will remain in active management.
- The National Park Authority and partners will identify priorities and opportunities for control programmes on a landscape scale, through both grant funding and officer time.
- Work with partners, such as PlantLife, to monitor control sites that will produce data on clearance and habitat restoration that can be used by land managers to inform future management.
- Ensure all long-term forest plans detail management of invasive rhododendron in line with the FCS publication⁴.

Indicators of success by 2023

- Increase the area and number of sites under active Rhododendron management

Geographic focus

Priority areas for invasive rhododendron control as defined in the Loch Lomond & The Trossachs National Park Trees and Woodland Strategy are East Loch Lomond, Loch Lomond Islands, North and West Loch Lomond, Strathard, the Trossachs and Loch Goil. Designated sites, and their buffer zones, with rhododendron pressures will be prioritised.

³ Ben A'an and Brenachoile Woods, Boturich Woodlands, Craig Royston Woods, Cuilvona and Craigmore Woods, Fairy Knowe and Doon Hill, Glen Loin, Inchlonaig, Inchtavannach and Inchconnachan, Stronvar Marshes, and Trossachs Woods

⁴ [Managing invasive and non-native forestry species.](#)

Working group

- Forestry & Land Scotland
- Land Manager Representative
- Loch Lomond & The Trossachs National Park Authority
- Loch Lomond & The Trossachs Countryside Trust
- SNH

Riparian INNS

The presence of invasive non-native species (INNS) within any habitat can reduce ecological connectivity due to the robust, structural growth of many INNS and the possibility of disturbance and spread.

The removal of INNS allows smaller native plants to recolonise including grasses, ferns and flowering plants. Re-colonisation of native species will result in an increase in native biodiversity and has the potential to encourage the expansion of vulnerable native species.

This working group aims to prevent, monitor and control the introduction, spread and extent of INNS that affect the riparian zones of the rivers and lochs in a sustainable manner on a catchment-wide scale. The focus will concentrate primarily on the control of invasive non-native plants: Giant hogweed, Japanese knotweed, Himalayan balsam and American skunk cabbage. Coordination will be included where overlap with the rhododendron working group occurs in the riparian zones.

It is recognised that complete eradication of INNS may not be attainable due to the high risk of re-infestations. The strategy is to manage INNS so that they do not severely affect the riparian corridor of the National Park's water courses.

Objectives by 2023

- Reduce riparian INNS that negatively affect habitats in the National Park along with active control of any spread, prioritising designated sites.
- Develop control programmes at a catchment level to remove known riparian INNS from the Upper Tay, Upper Forth, Teith, Loch Lomond, Endrick, Loch Eck and Loch Goil catchments, and ensure management of contamination downstream.
- Continue to use agreed monitoring and recording process which will also report on indicators of success.
- Work with land managers, fishery trusts, government agencies, communities and volunteers to reduce the extent and damaging impact of these species and, wherever possible, remove them completely.
- Develop rapid response measures for removal and control to any new outbreaks of riparian INNS.
- Train volunteers and land managers involved in projects to control riparian INNS.
- Raise awareness of how to avoid spreading riparian INNS through both formal and informal education.
- Work with partners to keep up-to-date records of known INNS locations by mapping the locations of INNS and use treatment and survey data.
- Devise an overarching Riparian INNS strategy with agreed criteria for prioritising treatment of non-native riparian INNS plants within the NP, both the geographic areas to be prioritised first and the species to be prioritised within each catchment or sub catchment.

Indicators of Success by 2023

- Action Plans in place for all major catchments to tackle riparian INNS.
- Reduce the number of habitats in unfavourable condition due to riparian INNS.
- Monitor the number of trained volunteers delivery days.
- An increase in the number of land managers trained and actively controlling riparian INNS.

Geographic Focus

- Tay
- Forth
- Lomond
- Endrick
- Eck
- Goil

Priority areas will be designated sites, however working at the top of the catchment and working downstream is the most efficient and effective method of control.

Working group

- Argyll Fisheries Trust
- Forestry & Land Scotland
- Forth River Trust
- Land Manager Representative
- Loch Lomond & The Trossachs National Park Authority
- Loch Lomond & Trossachs Countryside Trust
- Loch Lomond Fisheries Trust
- RSPB
- SEPA
- SNH

Mammalian INNS

Non-native animals are having a significant negative impact on our native ecosystems, being responsible for the decline of native species by direct predation, carrying diseases and viruses to which our native species have no resilience and out-competing our native species. In combination with direct control of the mammalian non-native species we want to undertake habitat restoration that will encourage the return of our native wildlife.

The work that is being carried out in the National Park complements the [Scottish Invasive Species Initiative](#) (SISI) which is led by Scottish Natural Heritage (SNH) and is funded by the Heritage Lottery Fund, SNH and by in-kind support from project partners and volunteers. This initiative is a four-year partnership project set up to tackle invasive non-native species alongside rivers and watercourses in northern Scotland.

The working group will concentrate primarily on the control of invasive non-native animal species – grey squirrel and North American mink, which will have beneficial results to the red Squirrel and Water Vole populations, respectively.

Objectives by 2023

- Reduce the population and re-colonisation of grey squirrel and North American mink in National Park through a network of community-led groups and land managers continuing responsible trapping efforts in vulnerable areas.
- Retain effective grey squirrel and mink control in areas where populations have declined to ensure densities do not regain.
- Involve land managers and local communities in the reporting of INNS species.
- Continue to promote recording of squirrel sightings through Scottish Wildlife Trust site.
- Increase the presence of water voles found during annual surveys.
- Improve habitats from native species, such as better connected native woodlands and more naturalised water courses.
- Provide information on responsible land management to encourage land managers to have good forest and riparian management that benefits native species, such as creating water bodies, reducing bank side poaching, planting the correct tree species etc.
- Collaborate with partners to deliver native mammal conservation education throughout the National Park through public events, interpretation, social media etc.
- Increase volunteer involvement in surveys.
- Continue and increase collaboration with land managers to reduce the presence of mammalian INNS but also to improve habitats to favour native species.
- Increase numbers of active volunteers (monitoring and control).

Indicators of success by 2023

- Increased sightings of red squirrels
- Increased population distribution of water voles

Geographic Focus

- Riparian corridors, such as the Callander area on the River Teith

Frontier between red and grey squirrel populations in areas such as the west side of Loch Lomond from Helensburgh up towards Tarbet/Arrochar and on the east side of the park from Stirling up towards Callander.

Working group

- Forestry & Land Scotland
- Forth Rivers Trust
- Land Manager Representative
- LLTNPA
- Scottish Wildlife Trust (SSRS)
- SNH

Climate Change Pressures

We need to ensure that ecosystems in the National Park are resilient to the effects that climate change is bringing to our native biodiversity and wider environment. These ecosystems can also help mitigate climate change by maintaining carbon stores, sequestering carbon, and storing surface water. The National Park's peatlands hold an estimated 20 million tonnes of carbon and our forests hold another 2.5 million tonnes.

Local land managers will need to adapt to a changing climate and can help mitigate against it by embracing technologies and practises that capture carbon. By taking a more integrated approach to land use planning, we can also help deliver significant adaptation to and resilience against climate change for our communities and wildlife.

The National Park is seen as a place to demonstrate and pilot innovative approaches to managing these habitats with partnerships between private and public land interests, industry, public bodies, third sector organisations, and local communities. Over decades our moorlands have been drained and eroded. We need to block those drainage systems, halt the erosion, and cover bare peat to retain water in the hills for longer. This can reduce the risk of flooding in the lowlands and move towards restoring healthy peatlands that are capturing, rather than emitting, carbon-based greenhouse gases. Our woodlands and forests are important stores of carbon, timber, and biodiversity and an expansion of woodlands will increase the value of these natural resources. These habitats provide multiple public benefits. Investment in this natural capital is a key target at a local, regional and national level. We need to focus on creating areas of native woodland and improving existing native woodland condition by reducing grazing or removing INNS, to enable a wider and more resilient woodland habitat network.

The objectives detailed below link to the indicators of success as details within the National Park Partnership Plan and aim to support delivery on the ground to help achieve these key indicators.

Objectives by 2023

- Woodland creation:
 - Implement the Trees & Woodland Strategy for the National Park leading to increased woodland creation and carbon capture.
- Peatland restoration:
 - Reduce carbon and water flows through restoration of peat bogs and raise awareness of the value of peatlands in the climate emergency.
 - Increase the public's understanding and appreciation of the value of peatland habitats by working in partnership to host public events and talks, visitor centre displays and increasing volunteering opportunities to get involved in improving peatland habitats e.g. constructing peat dams, removal of INNS, surveys and the Mountains and the People project.
- Resilience:
 - Pilot the use and management of trees, woodlands, peatlands and waterways upstream to reduce the risk of downstream flooding.
 - Work with land managers to protect and enhance soils, and remove INNS in order to increase resilience to climate change impacts.
 - Investigate natural flood management options to alleviate flooding in Aberfoyle, Callander and in the Loch Lomond catchment.

- Promote the management of designated sites which move these protected areas towards favourable condition.

Indicators of success

- Increased area (ha) of peatland on road to recovery (as reported under the National Park Partnership Plan).
- Increased area (ha) of woodland expansion (as reported under the National Park Partnership Plan).
- Increased area (ha) existing native woodland under positive management.
- Increased number of people engaged in peatland restoration.
- Increased number of people engaged in woodland creation and management through training or demonstration days.

Geographic focus

- Areas with degraded peatland, such as areas surrounding Balquhiddar Glen and to the east and west of Loch Lomond, including Strathard.
- Priority woodland areas as detailed in the Trees and Woodland Strategy e.g. Atlantic Woodlands, Caledonian Pinewoods, and areas that would improve connectivity of designated and other ancient woodlands. Climate change measures will also be investigated in the implementation of the Greater Cononish Glen Management Plan.

Designated sites will be a key focus.

Working group

- Forestry & Land Scotland
- Land Manager Representative
- National Trust for Scotland
- Peatland ACTION
- SEPA
- SNH
- Woodland Trust Scotland

Appendix

Wild Park Project List – see attached spreadsheet