

ECOLOGY

STRATEGY

ECOLOGY STRATEGY & ACTION PLAN
NOVEMBER 2024



Image: Red Squirrel

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FOREWORD

The Highland Council is the largest Local Authority area in the UK, with the longest coastline. Our precious, iconic landscape is one of the most biodiversity-rich areas of the UK supporting 75% of the UK's Priority habitats and 1,500 of the 2,000 Scottish Biodiversity List species. The Highlands are the last remaining stronghold for many species, such as capercaillie, dotterel, and the wildcat.

Biodiversity is, however, in rapid and drastic decline. Capercaillie populations more than halved between 2011 and 2020 and wildcat is on the brink of extinction with an estimated population of just 200 and now relying on a captive breeding and release programme to reestablish this species.

We now know that the climate and ecological emergencies are interlinked and reinforcing and, as with climate change, biodiversity loss threatens our wellbeing and survival as a species. The Highland Council, along with our communities, partners and stakeholders, must act urgently and decisively to address the ecological emergency and halt and reverse biodiversity loss.



Image: Capercaillie

This Strategy sets out the Council's approach to tackling the ecological emergency and contributing to Scotland's target to be nature positive by 2030 and to have restored and regenerated biodiversity by 2045.

The Strategy focuses on Council operations. We have already started taking action to deliver better biodiversity outcomes through our work, but we must accelerate our efforts; we will not address the ecological emergency through taking a 'Business as Usual' approach.

Transformational change is required across the Council to integrate biodiversity enhancement measures into all operations and service delivery.

As we have set out in the Council Programme 2022-2027, we are ambitious for the future of our environment and recognise the importance of accelerating our response to the pressing climate and ecological emergency. We know that positive action can deliver more comprehensive economic, environmental, social and health benefits, including within our rural communities. Biodiversity is also one of our greatest economic assets. In Scotland, the

sustainable use of our environment contributes over £17 billion annually to the economy. We must embrace the potential of the 'green economy' and nurture the development of new green industries that create jobs and wealth.

The scale of the ecological emergency is significant, we will need to overcome many challenges and we will require a long-term vision. We are confident that through leadership and acting as an exemplar in delivering ambitious change, we can bring transformative action to tackling biodiversity loss in Highland.



Councillor Ken Gowans,
Chair of Economy and Infrastructure Committee

EXECUTIVE SUMMARY

This Ecology Strategy demonstrates the Council's commitment to tackling the ecological emergency and to reverse biodiversity loss for the benefit of our environment, the economy, our communities and visitors. The Strategy outlines the actions we will take to play our part in responding to this complex and multifaceted issue.

The Strategy sets out a suite of actions that will see us manage the Council estate more effectively for biodiversity; influence others through the implementation of policy and guidance; and work with our communities, regional and national partners and stakeholders to engage in collective action to tackle the ecological emergency together.

The Strategy has been developed with input from Council Members and officers, stakeholders and partners including the Highland Environment Forum.

A number of issues that directly and indirectly affect biodiversity, including waste, pollution and procurement, have already been identified as Actions in the Council's Net Zero Strategy, adopted by the Council in 2024.





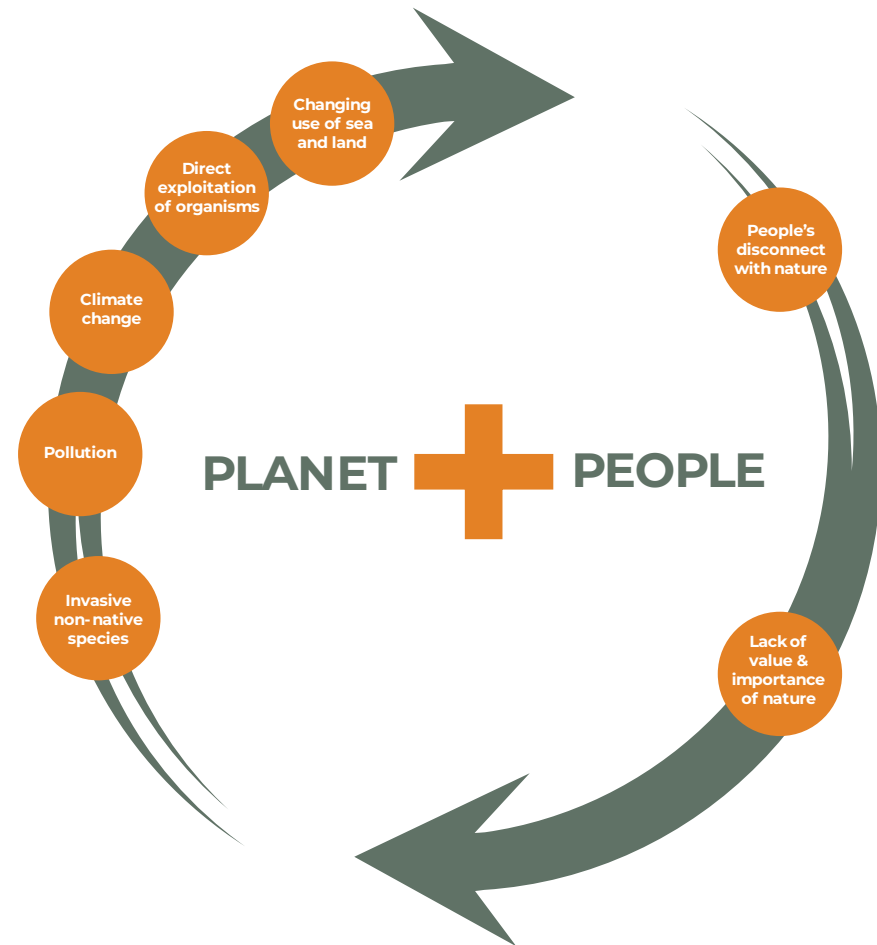
Image: The Flow Country

1. INTRODUCTION

1.1 The Ecological Emergency

The World Economic Forum's Global Risk Report (2024) identifies biodiversity loss and ecosystem collapse as the third most significant threat humanity will face in the next ten years. Healthy ecosystems provide many vital services including pollution reduction, seed dispersal, climate regulation, water purification, preventing and mitigating flooding, nutrient cycling, and pest control. Biodiversity provides many of our essential needs, such as food, energy, shelter, and medicine and is integral to our economy and health and wellbeing.

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) identified five direct and two indirect drivers of global biodiversity loss:



These global drivers are also affecting Scotland's nature and its most special habitats and species. The **2023 State of Nature Report** identified significant declines in Scotland's biodiversity with Scotland and the UK having some of the poorest biodiversity intactness ratings in the world. It shows that the number of species, and their geographic spread in Scotland, has declined overall, with 1 in 9 species threatened with extinction. The seabird census – Seabirds Count – that ran from 2015-2021 shows a steep decline in many species. Trends in key Scottish seabirds show that 70% are in decline, including Puffin (with declines of at least 21%), Arctic Tern (declined by 54%), Black-headed Gull (declined by 75%) and Arctic Skua (declined by 66%). These figures do not account for the recent avian flu epidemic and the dramatic decline recorded in the census is likely to be much higher. The distribution of flowering plants has been reduced by 47%, leading to ever smaller, more vulnerable populations, and 75% of our peatlands are degraded.

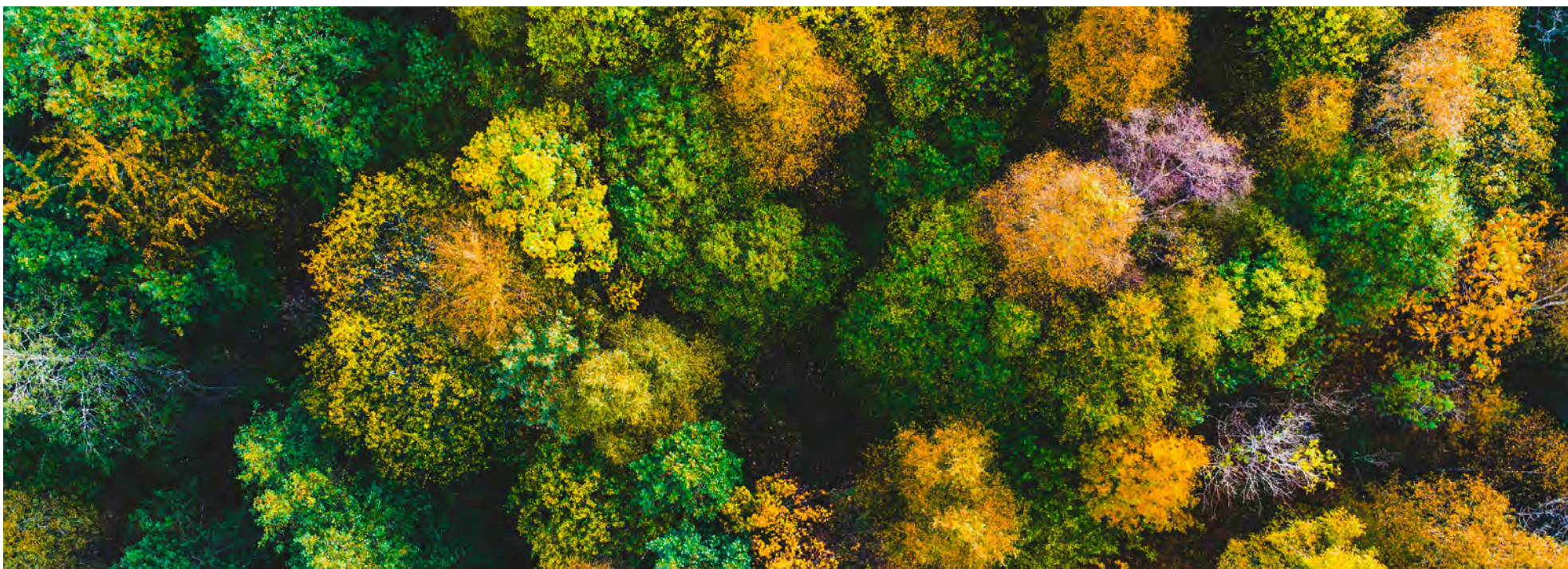


Image: Mixed Native Woodland

1.2 Our Response

In 2019 the Highland Council declared a climate and ecological emergency and in 2022 the ecological emergency was added to the Council's Corporate Risk Register. In early 2023 the Council became a signatory to the Edinburgh Declaration, underlining on the world stage its commitment to tackle the ecological emergency and reverse biodiversity loss.

The Council acknowledges the ambitious targets for biodiversity set out in the Scottish Biodiversity Strategy. This Strategy seeks to ensure that the Council will play its part in helping Scotland be nature positive by 2030 and to have restored and regenerated biodiversity by 2045.

In 2023 the Council approved the Net Zero Strategy, a key output of which is the Ecology Strategy and Action Plan. Climate change and the ecological emergency are twin reinforcing crises with biodiversity loss exacerbating the climate crisis, and vice versa. Conversely, the actions we take to reverse biodiversity loss will also help tackle the climate emergency; healthy habitats that sequester and store carbon are essential if we are to decarbonise. Through the Net Zero Strategy, the Council has adopted the Scottish Government's Net Zero by 2045 target, although we aim to achieve this sooner by reducing emissions by at least 75% by 2030 and at least 90% by 2040.





Image: Bottlenose Dolphins

2. ACTION PLAN

The Council recognise that we have a key role to play in tackling the ecological emergency in Highland and in contributing to national targets. The Action Plan is a Council-wide programme of activities to deliver on the ambitions set out in the Council Programme 2022-2027 to accelerate our response to the pressing climate and ecological emergency.

The Actions identified in the sections below highlight key areas where we will make a significant contribution to tackling the ecological emergency; many actions are already underway, others are in the planning stage and some require further investigation and identification of funding. Whilst our initial focus will be on how we manage our estate and influencing others through policy and through the planning system, we recognise the importance of working with partners and communities, challenging others to take similar steps to make a difference.



Image: Smithton and Culloden Flood Protection Scheme

The Actions are grouped under six themes and will:

1. Demonstrate leadership through the development of joined-up and ambitious policy and guidance; through leading by example on our capital programme and development projects; and by working in partnership to promote high standards.
2. Create space for nature by taking action across the Council and with partners to better manage existing space and create additional space to benefit nature at a local, landscape and regional scale.
3. Ensure that our Planning system supports The Highland Council's ambition to protect, restore and enhance nature within Highland.
4. Reduce pollution through waste management strategies, minimise light and noise pollution and review our own usage of biocides.
5. Improve communication, training and education to communicate the value of biodiversity within the Council, with partners and local communities.
6. Improve our data collection and management to ensure data is accessible, underpins decision-making and can be used to measure biodiversity and report change.

There are many additional activities taking place across the Council, including providing ecological advice to the Planning Authority, developers and agents, that we consider 'business as usual' that will either directly or indirectly contribute to tackling the ecological emergency. The Actions will be reviewed annually and will evolve over time to respond to new research, learning, guidance, policy and legislation, shared priorities and funding opportunities.



2.1 Legislation and Strategies informing the Action Plan

<p>International</p>	<ul style="list-style-type: none"> • United Nations Sustainable Development Goals • Edinburgh Declaration
<p>National</p>	<ul style="list-style-type: none"> • Nature Conservation (Scotland) Act 2004 • Environment Act 2021 • Natural Environment Bill (forthcoming) • National Planning Framework 4 and supporting guidance • Scottish Biodiversity Strategy and Delivery Plan • National Climate Change Targets • Glasgow Food and Climate Declaration • Pollinator Strategy for Scotland 2017-2027 • Marine (Scotland) Act 2010 • Scotland’s National Marine Plan
<p>Local</p>	<ul style="list-style-type: none"> • Highland Council Net Zero Strategy (2024) • Highland-Wide Local Development Plan (2012) • Area Local Development Plans • Indicative Regional Spatial Strategy for Highland • Highland Forestry and Woodland Strategy (2018) • Tree Management Strategy (2023) • The Flow Country World Heritage Site management plan (forthcoming) • Food Growing Strategy • Biodiversity Enhancement Planning Guidance (2024) • Verge Maintenance Guide • Weed Control Strategy (forthcoming) • Highland Nature Biodiversity Action Plan 2021-2026 • Cairngorms National Park Partnership Plan 2022-27





Image: Scots Pine and Silver Birch

GOAL 1: LEADERSHIP

Addressing the ecological emergency requires joined-up and ambitious policy, guidance and funding; the Ecology Strategy seeks to put nature at the heart of the Council's decision-making to deliver a healthier Highland for nature and people.

The Council will lead by example by incorporating and embedding biodiversity and nature recovery within our capital programme and development projects and within our estate management operations. We will develop forward-thinking ambitious policy and guidance to ensure development in Highland safeguards, enhances and celebrates our unique natural heritage to meet local and national priorities.



Image: The Highland Council signs the Edinburgh Declaration

The Council will continue to work in partnership with our stakeholders across the public, private, community and third sectors on existing projects and will look for opportunities to develop and input into new initiatives. With our partners we will provide strategic input, identifying priorities and galvanizing action to address the most urgent environmental issues affecting Highland and its communities.

The Council will lobby Scottish Government to provide regulation, legislation, policy and guidance that will enable local authorities to tackle the ecological emergency with the right tools and urgency required. We will ask that Scottish Government allocate the resources and funding necessary to enable local authorities to deliver real change and positive biodiversity action at the heart of the communities we serve.

The Flow Country Green Finance Initiative

The Flow Country Green Finance Initiative is a locally-led initiative to raise money to restore peatlands at scale. It aims to support community development goals, creates high-quality jobs, carbon investments, ecosystem services, and support circular business models. The Council sits on the Steering Group and has co-led engagement and consultation.

The main objective is to establish a new model for peatland restoration that blends public and private finance to facilitate a Just Transition that benefits biodiversity, communities and the local economy.

The Flow Country Green Finance Initiative will help achieve the twin climate goals of reducing emissions and sequestering carbon while restoring rare and valuable peatland ecosystems.

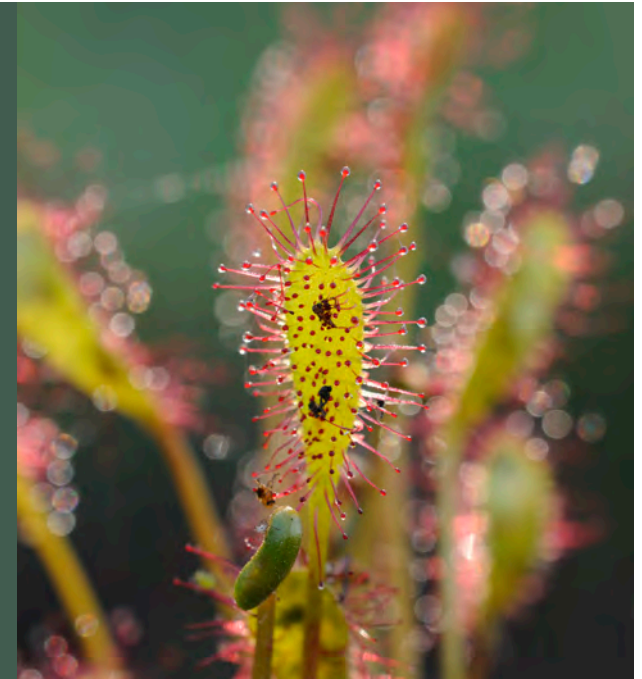


Image: Sundew

The Flow Country World Heritage Site Project

In July 2024, The Flow Country was officially inscribed as Scotland's first purely natural World Heritage Site (WHS) and the world's first peatland WHS. This is a remarkable achievement for the region, which gives the peatlands the same status as the Great Barrier Reef and The Grand Canyon.

The Flow Country is a vast, rolling expanse of blanket bog, with sheltered straths and mountains spanning c.4,000 km² across Caithness and Sutherland. It is appropriately named after the Old Norse word 'floi', meaning 'wet marshy ground'. The region is renowned for its incredible landscape; the Flows contain over 5% of the global blanket bog resource along with many rare birds and bird assemblages, insect and plant species.

The bid was led by The Flow Country Partnership SCIO, formed in 2006, and comprises multiple organisations, including The Highland Council who act as a Responsible Body. The WHS accolade will have benefits not only for the environment but for eco-tourism, education and local producers.

GOAL 1 ACTIONS: LEADERSHIP

Theme	Ref	Action	Timeline
Leadership	1.1	Embed biodiversity and biodiversity enhancement within our own capital programme and development projects.	2025 and Ongoing
	1.2	Develop forward-thinking ambitious policy and guidance to ensure development in Highland safeguards, enhances and celebrates our unique natural heritage.	Ongoing
	1.3	Work with our elected members and encourage greater participation and positive action in the Council's Species Champions Initiative.	Ongoing
	1.4	Lobby government to: <ul style="list-style-type: none"> • Provide support for biodiversity through cooperative action, legislation, policy and resourcing and funding. • Recognise Highland as a special case for tackling the ecological emergency and contributing to national targets. • Allocate dedicated funding for the protection, adaptation and resilience of our coastal communities and habitats, including the seabed. • Take action to work with coastal communities to mitigate the impacts of sea level rise and implement nature-based solutions to help protect coastal habitats. 	Ongoing
	1.5	Act as a trusted partner for individuals and community groups wishing to address the ecological emergency. Individual services within The Highland Council will provide bespoke support relating their areas of expertise.	Ongoing
Green Finance	1.6	Explore further the need for a coordinating body for nature restoration and green finance in the Highlands, to share best practice and seek support.	2025
	1.7	Lead by example by attracting green finance to support nature-based projects to tackle issues such as flooding and nature restoration.	Ongoing



Theme	Ref	Action	Timeline
Green Finance	1.8	Continue to input into the Flow Country Green Finance Initiative to attract private investment to restore peatland in Caithness and Sutherland.	Ongoing
Partnerships	1.9	Continue to be a key partner and accountable body in the Flow Country Partnership SCIO, ensuring that World Heritage Site status brings benefits to both the peatlands and surrounding communities.	WHS status confirmed. Ongoing support
	1.10	Act as a trusted partner for individuals and community groups wishing to address the ecological emergency. Individual services within The Highland Council will provide bespoke support relating to their areas of expertise.	Ongoing
	1.11	With key partners, lead the development and implementation of the new Highland Biodiversity Action Plan.	2025-26
	1.12	Work with our community planning partners and local communities to address the ecological emergency.	Ongoing
	1.13	Engage with international partnerships and organisations, such as KIMO International and UNESCO, to share knowledge and best practice.	Ongoing, including hosting KIMO annual conference in 2025
	1.14	Work with Scottish Government to explore the practicality of a Carbon Emission Land Tax. [awaiting confirmation]	2025-2026
	1.15	Continue to contribute to the Highland Green Health Partnership and advocate for the human health benefits of biodiversity and natural spaces.	Ongoing

GOAL 2: MAKING SPACE FOR NATURE

The importance of Highland's habitats and species is recognised through 35% of its land mass and 67% of its coastal zones being designated as protected areas of national and international importance. These include RAMSAR, Special Areas of Conservation (SACs), Special Protected Areas (SPAs), Sites of Special Scientific Interest (SSSI), the Wester Ross UNESCO Biosphere, the Northwest Highlands Geopark and The Flow Country World Heritage Site (WHS).

The Council Estate

The Council estate offers many opportunities to deliver biodiversity enhancements to benefit both nature and people; studies have shown that biodiverse spaces, such as native woodlands and wildflower meadows often provide greater biodiversity than uniform greenspaces, like amenity grasslands or sports pitches. The amenity and lifestyle values of green spaces are not, however, underestimated in this Strategy.

The Council appointed a Greenspace Officer in May 2023 to develop and implement a suite of projects to increase the amount of Council-owned green and brownfield land managed positively for biodiversity, to identify habitat restoration and creation opportunities and to enhance the functional connectivity of local nature networks.

Low mow grassland

Across the Council estate we are increasing the amount of amenity grassland being managed for biodiversity. We are managing areas of grass less intensively by mowing less often, allowing wildflowers and grasses to thrive to provide additional habitat. Low mow grassland absorbs more carbon and requires less carbon to manage, helping us address the climate emergency and bring financial savings. We will add signage to biodiversity projects to communicate the value of this enhancement work and to alleviate concerns around reduced mowing strategies.

In Boswell Park, Inverness areas of grass are now being managed as part of a low mow regime



Tree Planting

The Flow Country Green Finance Initiative is a locally led initiative to raise money to restore peatlands at scale. It aims to support community development goals, creates high-quality jobs, carbon investments, ecosystem services, and supports circular business models. The Council sits on the Steering Group and has co-led engagement and consultation.

The main objective is to establish a new model for peatland restoration that blends public and private finance to facilitate a Just Transition that benefits biodiversity, communities and the local economy.

The Flow Country Green Finance Initiative will help achieve the twin climate goals of reducing emissions and sequestering carbon while restoring rare and valuable peatland ecosystems.

Accessing Funding

The Council will continue to bid for external funding to deliver biodiversity projects. We have successfully accessed funding from the Scottish Government's Nature Restoration Fund (to deliver nature-based flood mitigation and pollinator habitat creation) and Scottish Marine Environmental Enhancement Fund (to undertake salt marsh monitoring and restoration with partners).

The Council will continue to explore innovative blue and green finance initiatives to unlock both public and private investment for nature restoration in Highland. Ideally, the profits from these initiatives can be reinvested into local communities, as will be the case with the Flow Country Green Finance Initiative.



Image: Tree Planting in Garve

Thriving Green Communities and Places

We recognise that the best approach to tackling the ecological emergency is with the support of local people. Taking on the climate and ecological emergency is the greatest challenge of this generation, and it will require innovative thinking and new ways of working if we are to be successful.

The Council will continue to support communities in their efforts to make space for nature. This may include actions to plant native plants and trees; plant fruit forests; install nest boxes, bat boxes and bug hotels; create and enhance habitat; increase local wildlife-friendly food growing; and develop nature networks, including urban nature networks (through biodiversity villages for example) to enable wildlife to move across the Highlands with ease.

Research shows that urban and rural places with healthy ecosystems and greater biodiversity make better places to live and work. Healthy ecosystems give us cleaner air and water, provide places to relax and exercise and make home and work environments more pleasant. The Highland Green Health Partnership and the associated 'Think Health, Think Nature' Initiatives, for both of which The Highland Council is a partner member, are helping to unlock these benefits for people across the Highland region. We know that green spaces, such as parks and allotments, can positively impact mental health, and a growing body of research shows economic benefits, such as improved productivity and higher customer footfall. Many Highland jobs depend on a healthy environment, including those associated with nature tourism, fishing, forestry, and food production. The Council will also seek to improve its communication of the risks around tick bites and Lyme disease, to ensure that residents and visitors are aware.



Green spaces are a valuable asset to the Highlands. Access is an essential issue for our green space planning, and we recognise that access to green spaces is not uniformly available across Highland. We also know that cultural, economic, health or other barriers to accessing green spaces sometimes exist. As part of the Local Development Plan review process, we will work with local communities to overcome these barriers and ensure fair access to quality, biodiverse green spaces for everyone.

Growing Our Future

The Council is committed to making suitable land available to community food-growing projects through the Community Empowerment Act 2015 and our "Growing Our Future 2022-2027" community food-growing strategy.

Growing Our Future gives examples of community growing across Highland, including edible villages, school projects, community orchards, and community gardens, such as the Raasay Walled Garden. The Strategy promotes biodiversity-friendly food growing that supports pollinators, incorporates wildflowers and utilises native hedging.

The Strategy seeks to improve access to land for community food growing and help community groups and schools set up projects on Council land.



Image: Community Food Growing in Raasay Walled Garden

Wildflower Roundabouts

In 2022, The Highland Council established five wildflower roundabouts in the Inverness area. In the summer they serve both as a vibrant and eye-catching display for road users and pedestrians and, more importantly, as an oasis for our pollinators.

In September, as the summer season comes to a close, the wildflowers are cut and the mulch removed to ensure that the soil stays nutrient poor for the next generation of wildflowers to thrive. In the early spring crocuses and daffodils provide early-season pollinators with an initial food source.

The project aims to help support populations of bees and other pollinators, which have shown a dramatic decline due to pollution, intensive farming practices, loss of wildflowers and insecticide exposure. Pollinator-friendly techniques are being used to maintain the roundabouts, including restricting the use of weedkillers, chemical sprays or other pesticides.

Special Verges

Special Verges are verges that are important for biodiversity; there may be a particularly diverse mix of native wildflowers, it may be home to rare species of plant, or it may provide an important connection between adjacent nature rich habitats. Verges within designated areas may also be identified as Special Verges.

The Council, in partnership with local conservation groups and NatureScot, will identify, map and list Special Verges across the Council's road network and adopt appropriate management regimes to ensure the biodiversity interest is conserved.

Our roadside verges, if managed sensitively for nature where it is safe to do so, offer huge potential for biodiversity through the creation of linear nature networks that provide a corridor for both plants and animals.



Invasive Non-Native Species (INNS)

Non-Native species are any flora or fauna species introduced (deliberately or accidentally) by human activity to an area where they do not naturally occur. Some species may have been transported here long ago and be considered "naturalised", but these are still non-native species.

It is important to remember that while over 900 non-native species exist in Scotland, only a minority become Invasive Non-Native Species (INNS). Still, these few can severely impact ecosystems with INNS being identified as one of the major drivers of biodiversity loss in the UK by outcompeting native species. INNS can also impact the local economy, human health, and essential infrastructure; the Scottish Government estimates that £200 million is spent annually controlling INNS.

The Council will produce an Invasive Non-Native Species Strategy to direct its response to INNS and offer advice to landowners and managers. As a public body, the Council has an environmental duty to act in the public interest on INNS. If a member of the public identifies an INNS, it is recommended that they report this through the iRecord website.

Where INNS are present on Council land they will be treated in accordance with relevant legislation and guidance. The Council will continue to support Scottish Invasive Species Initiative (SISI) and where funding is available we will undertake projects to remove INNS, especially where they pose a risk to Council infrastructure. Where the Council interacts with INNS on development sites we will ensure biosecurity measures are in place; we will conduct detailed checks and risk assessments within initial site feasibility assessments and surveys and carry out construction in accordance with best practice.

Invasive Non-native Species (INNS) Control at Whin Park Pond

In 2022 New Zealand pygmy weed was identified by the Council as being present in Whin Park boating pond, Inverness. A visual and drone survey estimated that the weed covered 99% of the pond floor. Nature Restoration Fund monies were used to enable a thorough survey of the pond, all riparian habitats, and water courses on the site. This was followed by draining the pond and the removal and appropriate treatment of the pygmy weed.

A follow-up survey in May 2023 found that the INNS reduced by 99%. The site will continue to be monitored and with any follow-up treatments applied where required.



Image: Whin Park Pond, Inverness

GOAL 2 ACTIONS: SPACE FOR NATURE

Theme	Ref	Action	Timeline
Resourcing	2.1	Increase and enhance the Council's resources and ability to provide advice to deliver the actions in the Ecology Strategy and tackle the nature crises.	2024
	2.2	Recruit a Council Tree/Arb Officer to ensure the Council's tree resource is managed sustainably and with improved value for biodiversity.	2024
Funding	2.3	Identify and secure external funding for marine and terrestrial biodiversity projects to, for example, enhance biodiversity across the Council's estate and deliver joint partnership projects and research more widely.	2024 and ongoing
Green Communities	2.4	Work with our flood and roads teams to identify funding for nature-based flood and erosion mitigating infrastructure.	2025
	2.5	Identify (with Council services and local communities) biodiversity enhancement projects to increase the amount of Council-owned and operated land being managed for biodiversity. This will include reduced management and new tree planting.	2024 and ongoing subject to funding
	2.6	Identify opportunities to enhance the Council's built estate to improve the biodiversity value of our buildings and to install nature-based solutions in partnership with Housing & Property service.	Ongoing
	2.7	Prepare and implement nature-positive amenity grassland management strategies for the public estate in town and cities by 2030, incorporating improved technical guidance for practitioners and access to suitable machinery for local authorities.	Ongoing
	2.8	Develop a site management plan for the Flow Country World Heritage Site which ensures the future health of the Flow Country peatlands.	2025

Theme	Ref	Action	Timeline
Green Communities	2.9	Explore opportunities to establish Fruit Forests and other initiatives within our settlements that provide both biodiversity and community benefits.	Ongoing
	2.10	Empower local communities to take positive biodiversity actions on green spaces.	Ongoing
	2.11	Improve signage to inform residents of the purpose and locations of our biodiversity enhancement initiatives. Also improve signage to warn people of the risks of tick bites and Lyme disease.	2025
Trees and Woodlands	2.12	Explore opportunities to consolidate all Council woodlands into the same service so they can be more proactively and better managed and open up opportunities to access grant funding.	2025-26
	2.13	Establish a Highland-wide approach to Ash Dieback and develop an Ash Dieback plan.	2025
	2.14	Update the Highland Forest and Woodland Strategy.	2025
	2.15	Implement a replacement planting programme to compensate for any trees that are removed at an enhanced level of at least 2:1 (in alignment with the Tree Management Strategy).	2025
	2.16	Implement projects to leave deadwood piles within woodlands and standing deadwood where safe to do so.	2024 and ongoing
Blue Green Infrastructure: Flood Risk	2.17	Embed biodiversity planning and Nature-based Solutions within local flood risk management strategies and coastal flood protection schemes.	2026
	2.18	Progress Castle Heather Park, Inverness nature-based flood scheme project to de-culvert a watercourse and create a wetland area within the park.	2025



Theme	Ref	Action	Timeline
Blue Green Infrastructure: Flood Risk	2.19	As part of a Scottish Marine Environmental Enhancement Fund (SMEEF) funded project in partnership with St Andrew's University, continue monitoring of salt marsh habitat around Loch Fleet and continued future expansion of salt marsh habitat in line with rising sea levels.	March 2025
	2.20	Explore emerging blue finance, such as the Saltmarsh Code and biodiversity credits for coastal and marine environments.	2025
Blue Green Infrastructure: Roads	2.21	Identify Special Verges (with partners) and implement new management regimes along our road network to benefit biodiversity.	2025
	2.22	Continue to implement and where possible expand the wildflower roundabout initiative and explore opportunities to utilize other parts of the road network for biodiversity enhancement.	2024 and ongoing
Blue Green Infrastructure: Active Travel	2.23	Improve and enhance the biodiversity value of existing and new active travel routes.	2024 and ongoing
	2.24	Investigate funding options for investment in blue/green flood and erosion control measures to protect coastal communities.	2025
Blue Green Infrastructure: Active Travel	2.25	Support a biodiversity/wildlife-friendly approach to food growing in the Council's new Allotment Policy (2024) and when reviewing the Food Growing Strategy in 2027. In particular, raise awareness of the value and fragility of our pollinator species.	2024 & 2027
	2.26	Collaborate with the Highland Good Food Partnership to direct Highland residents to information and support regarding biodiversity-friendly food growing.	2025
	2.27	Promote the establishment of fruit trees, fruit forests and orchards within food growing areas and within local communities and where possible, nature-friendly allotments.	2026

Theme	Ref	Action	Timeline
Invasive non-native species (INNS)	2.28	Identify and control INNS on the Council estate. Work with partners to support INNS removal/control across Highland in accordance with best practice.	Ongoing
	2.29	Complete Phase 1 of the Loch Lochy INNS project to identify Japanese knotweed and other INNSs in the Loch Lochy catchment and seek funding for Phase 2 to control/eradicate the plant in key areas.	2024-2025
	2.30	Finalise and implement Council INNS policy. Including sign posting the public to report sightings to the Scottish Invasive Species Initiative.	2024-2025



Image: Glenfinnan Viaduct

GOAL 3: PLANNING

Effective planning plays a vital role in safeguarding biodiversity and ensuring the resilience of natural ecosystems across the Highlands. Through considerate land use and development management, The Council can protect and enhance the ecological networks that species depend on for survival. By integrating biodiversity considerations into Local Development Plans and aligning with National Planning Framework 4 (NPF4), the Council will ensure that nature recovery remains a priority in future developments.

Nature Networks

Our habitats have become fragmented due to land management practices, development and associated infrastructure. This has led to a decline in species abundance and distribution, leading to isolated, fragile populations with reduced genetic diversity vulnerable to disease. Nature networks aim to reverse this by creating vital links and connectivity between habitats, allowing species to move easily across the landscape.

Healthy habitats also play a vital role in supporting healthy communities, as they provide flood protection, temperature regulation, air quality improvements, erosion control and food protection services.

NPF4 requires all local authorities, as part of their Local Development Plans, to promote nature recovery and nature restoration by designing, coordinating and delivering nature networks.

The Council will prioritise the design and coordination of nature networks across Highland and through the planning process will ensure that nature networks are strengthened and better connected. The Council will lead by example by

improving ecological connectivity on our own estate; we will map nature network opportunities on our land, prioritising the enhancement of greenspace, brownfield, vacant and derelict land to improve habitat connectivity.

We will identify and develop projects to install species-specific infrastructure to provide safer access for wildlife to move across the landscape, for example amphibian ladders in drainage channels, otter ledges under bridges and badger culverts under roads.

Highland's transport network, particularly road verges, footpaths and cycle tracks can all be improved for biodiversity, connecting habitats and delivering nature networks. We will look to change how verges are managed; enhance active travel routes by planting native trees, shrubs and hedging; build upon successful initiatives to improve the biodiversity value of our road network (for example the Inverness wildflower roundabout initiative); and investigate a range of options to green our road network to create pockets of valuable habitat that can function as stepping stones for wildlife.



Image: Heather

Local Nature Conservation Sites

Local Nature Conservation Sites (LNCS) are sites that are of local importance for their biodiversity or geodiversity. The Council is in the process of seeking nominations for LNCSs from communities and stakeholders across Highland. By the end of 2024 we will have compiled our first list of potential LNCS sites, we will have mapped boundaries and all sites will have been assessed and ratified by a panel of experts. The list of LNCSs will be developed and expanded over time as we become aware of new sites.

LNCSs are a material consideration in the planning process and will be an important component in the design of our nature networks. The list of potential LNCS sites will be included as part of the evidence report for the new Highland Local Development Plan.

New Development and the Planning Process

Securing positive effects for biodiversity is one of six statutory outcomes introduced by the Planning (Scotland) Act 2019. National Planning Framework 4 (NPF4) rebalances the planning system so that climate and nature recovery are prioritised in all plans and decisions. Improving biodiversity is a cross-cutting theme that runs throughout NPF4.

The Council will support the action in the Scottish Biodiversity Strategy to see 30% of Scotland's land and seas within areas protected or conserved for nature by 2030.

The Council recognises that delivering biodiversity policies appropriately, proportionately and consistently requires dedicated resource that can provide specialist and technical advice to planning officers, developers, agents and their consultants. We will ensure that the necessary resource is available to maximise opportunities to address the ecological emergency.

Policy and Local Development Plans

The proposed Inner Moray Firth Local Development Plan biodiversity policies are aligned with NPF4 and emphasise the importance of delivering nature-positive development across Highland. Likewise, we will align our new Highland Local Development Plan policies with NPF4 and where Highland-specific issues relating to biodiversity and the management of natural places, trees and woodlands are identified, ensure that appropriate local policies are put in place.

The Council will ensure it has a full and up-to-date suite of policies and guidance relating to the natural environment. We will make sure that developers are aware of their obligations towards biodiversity and that procedures are in place to enable planning officers to be confident in securing appropriate mitigation, compensation and enhancement measures.

We will produce local Biodiversity Planning Guidance that details the Council's requirements for developers to deliver NPF4 biodiversity policies in a proportionate, consistent and fair manner and Ecology Planning Guidance that provides developers with the ecology data requirements that must be submitted with applications. We will develop specific policy and guidance related to trees and woodlands including refreshing the Highland Forest and Woodland Strategy.

Development Management

The Planning Authority and the decision-making process will recognise the fundamental importance of biodiversity and will, wherever practicable, ensure that all new development meets or exceeds the relevant policy tests as set out in NPF4 and the LDP. Where development proposals affect designated sites or protected species their importance will be fully recognised and designated sites will be carefully protected from harmful development.

We recognise that the long-term management and monitoring of biodiversity enhancement and compensatory planting represents a challenge for the Council moving forward. We will explore options and investigate how compensation and enhancement is delivered for the long term, including through legal agreements and monitoring fees. We will map all areas that are subject to habitat enhancement, including areas identified for biodiversity enhancement and compensatory planting to ensure they are protected from incompatible land-use change and development.

Inverness and Cromarty Firth Green Freeport

The newly-formed Inverness and Cromarty Firth (ICF) Green Freeport will attract renewable energy projects and other green businesses to the Highlands.

The ICF has signed up to biodiversity enhancement as part of its net zero charter.

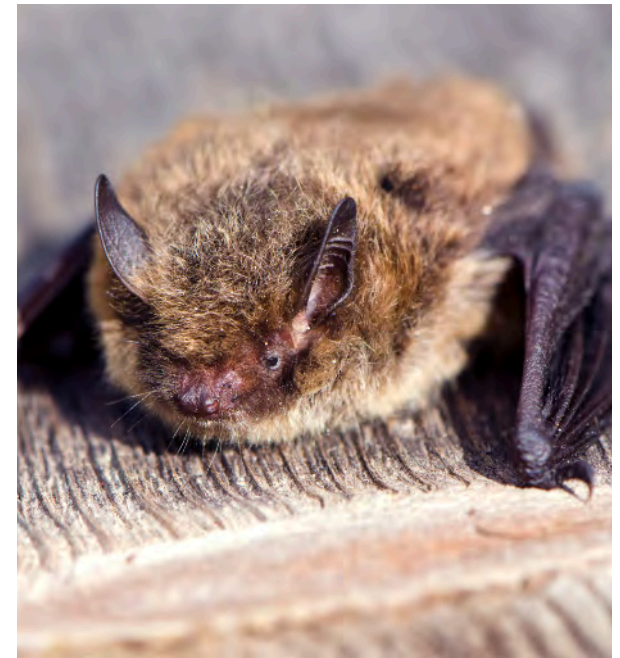


Image: Nathusius Pipistrelle Bat

Coastal and Marine Planning

The Council area contains more coastline than any other local authority in the UK. Our coastal habitats support a large number of seabird colonies, many of which are internationally important, including the Rum Manx shearwater colony, which holds over 30% of the world's breeding population. Our marine environment is rich in a vast array of species including salmon, dolphins, seals, whales, marine flora and sea birds. Marine biodiversity has, however, witnessed a significant decline in recent years. Much of our sea beds are now in poor condition, with several key habitats such as sea grass and flame shell beds covering only a fraction of their former areas. Many seabird species are in steep decline, with the overall abundance of 11 seabird species in Scotland down by an average of 49% since 1986.

The Council does not own or control significant areas of coastal habitat and mainly engages with the marine environment through planning and development, including aquaculture. We will continue to work in partnership with stakeholders and regulators to understand the value of coastal and marine habitats through which we can ensure effective marine planning and marine policy. Key partners such as NatureScot, The Scottish Environmental Protection Agency (SEPA) and the Scottish Association for Marine Science (SAMS) are heavily involved in protecting and enhancing biodiversity in Highland's marine environment and The Highland Council will continue to work with them on key projects and initiatives.

Sea the Value

Sea The Value is an exciting marine project that aims to understand the different values we hold towards our local marine environment, the diverse benefits it provides, and how nature-based solutions can potentially support community development. The Cromarty Firth is one of two research areas for this project, and the Council sits on the steering group. In the coming years, the project aims to:

1. Quantify the interlinkages between marine biodiversity, natural capital, and ecosystem services, considering quantity (extent), quality (condition), and resilience.
2. Determine the economic and social values associated with carbon sequestration and bioremediation of waste and apply these values to support natural capital accounting frameworks and engage real-world communities in mapping social values and trade-offs;
3. Connect biodiversity's ecological, economic, and social values to decision-making through co-design and implementation of green investment to maintain and enhance biodiversity.



Our coastal areas are not just important for wildlife, however, but also for coastal communities and visitors, for whom the coast provides opportunities for employment, recreation and sustenance. The Council will facilitate and keep abreast of changes to aquaculture regulation on, for example, anti-predation methods, microplastic pollution and noise pollution, and where appropriate, require suitable assessments and/or planning conditions to ensure interactions with the marine environment are understood and biodiversity is safeguarded. We will, for example, continue to condition adaptive management measures at fish farms to monitor and mitigate impacts of sea lice on wild fish populations.

Many of our low-lying coastal areas are under threat from erosion and flooding, particularly during storm events. We will work closely with our flood team to champion nature-based solutions to these threats

and to identify funding opportunities to support resilient coastal communities. This effort is part of a Council-wide focus on climate adaptation, spearheaded by the Highland Adapts project. We will also support marine and coastal biodiversity in other ways, for example, by working in collaboration with Local Authorities International Environmental Organisation (KIMO)'s Marine Litter campaign, working with ports and harbours to make disposing of fishing equipment easier, raising awareness of data collection campaigns such as iNaturalist, listening to coastal communities on marine biodiversity issues, engaging with The Scottish Government's Marine Spatial Planning Forum and working towards being the first Scottish Local Authority to adopt a Motion for the Ocean.



Image: Basking Shark



GOAL 3 ACTIONS: PLANNING

Theme	Ref	Action	Timeline
Nature Networks	3.1	Identify and map nature networks within Highland.	2024 and ongoing
	3.2	Identify – with partners and stakeholders - and map the first phase of Local Nature Conservation Sites (LNCS).	2025
	3.3	Identify opportunities and implement species specific infrastructure, i.e. swift boxes, otter ledges, amphibian ladders etc.	Ongoing
Planning Policy: LDP review	3.4	Ensure that the new Highland Local Development Plan includes robust policies in relation to marine and terrestrial environment, trees/woodlands and the impacts of climate change, particularly sea level rise. The new LDP will support Highland-specific issues/actions in relation to the ecological emergency.	2024-2027
	3.5	Promote the importance of the ecological emergency within local and area place plans.	2025
Planning Policy: Place Plans	3.6	Support Marine Spatial Planning for the Highland region and advocate for biodiversity protection and enhancement within these plans.	2025
Planning Policy	3.7	Develop and implement Biodiversity Planning Guidance detailing biodiversity compensation and enhancement requirements to fulfil NPF4 policy 3.	May 2024
	3.8	Develop and implement Ecology Planning Guidance detailing the ecological information required to be submitted with planning applications and update our Protected Species Guidance.	2024-2025
	3.9	Develop and implement web-based guidance for area-specific biodiversity enhancement as a resource for developers and the public.	2025-2026

Theme	Ref	Action	Timeline
Planning Policy	3.10	Review the Green Networks Guidance (as part of the LDP).	2025
	3.11	Develop guidance on how the Control of Woodland Removal Policy (including compensatory planting and public benefit) is to be implemented within Highland.	2025
	3.12	Investigate, as an alternative to delivering small parcels of compensatory planting, a financial payment option that can be used to deliver large-scale holistic planting schemes that deliver significant biodiversity benefits.	2025
	3.13	Work with Inverness and Cromarty Firth Green Freeport (ICF) and Key Agencies to establish the ecological baseline and potential impacts, mitigation, compensation and biodiversity enhancement measures for the Green Freeport.	2024-2025
Development Management	3.14	Ensure that all new development meets or exceeds the relevant policy tests in NPF4 and the LDP as supported by the Council's Biodiversity Planning Guidance and any other guidance as applicable.	2024 and ongoing
	3.15	Set up a spatial database of all areas set aside for biodiversity, including biodiversity enhancement, habitat management plan areas and compensatory planting to help ensure these areas are protected from incompatible land-use change and development. This will ensure that they contribute to biodiversity as part of our nature networks and help deliver net zero targets over the long-term.	2024-2025
	3.16	Identify and implement procedures for securing the long-term monitoring and maintenance of sites allocated for biodiversity enhancement and compensatory planting.	2025-2026



GOAL 4: POLLUTION AND CHEMICAL USE

Pollution is a key driver of the ecological emergency. Freshwater and coastal pollution in the UK, whether from sewage, single-use plastics and microplastics, industrial pollution, pharmaceuticals, or chemicals such as fertilisers and pesticides is an increasing and urgent challenge. Worldwide, plastic pollution alone is estimated to kill 1 million sea birds and 100,000 sea mammals, turtles and fish every year. In 2018 a study estimated that in the UK 2.9 million small mammals, such as shrews and wood mice, die each year due to roadside litter.

The Council will continue to work in cooperation and collaboration with organisations that seek to prevent pollution, including in the marine environment. The main actions the Council will take in reducing its own impact in relation to pollution, air quality and waste – some of the major drivers of biodiversity loss – are detailed in the Council's Net Zero Strategy.

Waste Management

Reducing waste of all kinds, including single-use plastics, can significantly benefit biodiversity locally and globally. By reducing the amount of waste in Highland and providing excellent recycling opportunities and waste collection, we reduce the opportunities for waste to enter the environment, where it can cause pollution and a direct hazard to wildlife.

The Council will continue to review the provision and collection of public litter bins around the Highland region and install appropriate signage to encourage the proper disposal of waste, in particular hazardous waste such as disposable barbeques, glass and cigarettes.

The Council's Net Zero Strategy includes actions and targets related to many aspects of waste and waste management.

Light and Noise Pollution

Light and noise pollution can disrupt the behaviour of many species and is a growing issue as settlements and human activity expands in range. Noise pollution, especially around the Moray and Cromarty firths, is likely to increase as the Inverness and Cromarty Green Freeport starts operations. We will work with developers to mitigate and/or avoid those impacts.

Light pollution can affect both birds and bats, impacting their roost sites, how they commute and feed. There is now evidence that modern LED lighting is having a significant impact on the habits of both bats and birds. Mitigating measures that retain energy-saving LED bulbs but reduce impacts on biodiversity – such as fitting filters and shields – will be investigated.

Pesticides, Herbicides, and other Chemicals

Biocides are used to kill mainly plants, fungi or invertebrate species that are viewed as “pests”, often to optimise agricultural production or "improve" the appearance or experience of gardens and other green spaces. The Council has predominantly used herbicides to control weeds and grasses that cause hazards or are perceived to reduce the amenity value of public spaces or to control/eradicate invasive non-native species.

The Council is, however, starting to reduce its reliance on chemical treatments and has committed to a partial ban on the use of herbicides that contain glyphosate. As part of the forthcoming Weed Control Strategy the Council are now opting to leave vegetation growth (which often includes native wildflowers) untreated or implementing more environmentally friendly methods to control unwanted plant growth; with the exception of controlling invasive non-native species, chemical treatment will be considered an option of last resort.

GOAL 4 ACTIONS: POLLUTION

Theme	Ref	Action	Timeline
Pollution reduction	4.1	Support the Net Zero Strategy actions to reduce waste and stop pollution.	Ongoing
	4.2	Work with colleagues in the Council's lighting team to consider and implement bat, bird and invertebrate friendly lighting and mitigation for the most damaging effects of LED lighting.	2025
	4.3	Review the Council's use of pesticides as part of the forthcoming Integrated Weed Control Strategy and progress the search for alternatives, identifying the benefits and costs of each option.	2024
	4.4	Continue to work with KIMO International to prevent pollution and to protect, preserve and enhance our marine environment	2024 and ongoing
	4.5	Work with Inverness and Cromarty Green Freeport partners and Key Agencies to avoid, minimise and mitigate impacts, including noise, on both marine and terrestrial biodiversity and to meet agreed biodiversity outcomes.	2024 and ongoing



Image: Fairy Glen, Isle of Skye

GOAL 5: COMMUNICATION, TRAINING AND EDUCATION

Communication and Reporting

We recognise that the public, our partners and stakeholders have an interest in the actions we will take to tackle the ecological emergency. We will share updates with the public, Council staff and partners and report progress annually to a relevant Council committee.

We will also develop the biodiversity pages of the Council's website to enable us to share information on ongoing and future projects, to show the work we are doing across the Council estate and provide geographical information on, for example, the location of sites being managed for biodiversity and sites that may be suitable for wildlife-friendly community food growing.

We will provide on-site information (including interpretation and signs) on Council sites that are being managed for biodiversity and we will make better use of social media and engage with local media to improve the reach of our messaging.

The Highland Council can help the Highland region to gain the benefits, while mitigating potential impacts, of tourism through its upcoming Sustainable Tourism Strategy and through site-specific advice, such as that found within the upcoming Flow Country World Heritage Site visitor management plan. These documents will set out clear action The Council and its partners can take to ensure that visitors to The Highlands can enjoy its natural beauty in a sustainable way. From May to October 2024, Seasonal Access Rangers have patrolled the NC500 to engage with visitors and raise awareness of the Outdoor Access Code, which can help to safeguard biodiversity and local communities.

We recognise the incredible enthusiasm across The Highlands to protect and celebrate our biodiversity. We will work hard to harness this enthusiasm by engaging with young people, communities and partners across the region on biodiversity projects and knowledge-sharing initiatives.

Training

The Council will deliver training to its staff and Members to ensure the Council is tackling the ecological emergency appropriately.

We are currently investigating options and designing training courses to be rolled out to all relevant officers and Members. We are also exploring options to encourage participation in nationally accredited programmes and qualifications such as Building with Nature, and to work towards Council schemes achieving Building with Nature Accreditation.



Image: Seagrass

Education

Many young people are engaged with the climate and ecological emergency and recognise the significant impact these two crises will have on their future.

The Council will continue to incorporate environmental issues and experiences in its schools. We will encourage participation in national projects such as the Bio-Blitz, NatureScot's Learning in Local Greenspace project and the Eco-Schools initiative. In partnership with our schools we will look to develop biodiversity enhancement projects, that can offer both educational and learning opportunities and wellbeing benefits, across the school estate.

The High Life Highland Countryside Rangers and The Council's Seasonal Access Rangers offer invaluable guidance, education, support and leadership on a range of environmental issues and projects. They provide a valuable connection for locals and visitors to the incredible natural wealth of Highland and provide valuable ecological education to various social groups through guided walks, online presentations, school visits and community events.

Eco-Schools

Eco-Schools is the world's largest sustainable school programme, with 19.5 million children, young people, and educators engaged worldwide in 74 countries. Eco-Schools is one of five programmes operated internationally by the Foundation for Environmental Education (FEE) and delivered by Keep Scotland Beautiful in Scotland.

Completing a Green Flag Application is recognised by the Green Flag Award - a visible indication of your school's commitment to Learning for Sustainability and an internationally recognised accreditation for excellence in sustainable education.

The Highland Council is proud to say that all our schools have been awarded an Eco-Schools (or greater) award since its introduction, with 152 schools receiving bronze awards, 148 silver and 100 green flags.

GOAL 5 ACTIONS: COMMUNICATION, TRAINING AND EDUCATION

Theme	Ref	Action	Timeline
Communi- cation	5.1	Report annually the progress of the Ecology Strategy to a Council committee(s).	2025
	5.2	Develop the biodiversity pages of the Council website to: <ul style="list-style-type: none"> • give information on the Council's actions to tackle the ecological emergency. • provide interactive mapping showing where the Council is managing land to benefit biodiversity and opportunities for food growing and community engagement. • include updates on plan progress and targets. • provide key Council contacts for greenspace projects and management. 	2025-26 and ongoing
	5.3	Improve communication/public relations through the appropriate use of press releases and social media posts to promote positive action undertaken by the Council.	2024 and ongoing
	5.4	Identify opportunities to support and work with a range of partners from across the public, private and third sectors to promote and address the ecological emergency.	2024 and ongoing
	5.5	Improve signage and on-site information (including QR codes) at biodiversity enhancement sites.	2025
	5.6	Promote awareness, importance and appreciation of Highland biodiversity to visitors in partnership with High Life Highland Countryside Rangers and Seasonal Access Rangers.	2025
	5.7	Raise awareness of the Outdoor Access Code through our Access Officers and Seasonal Access Rangers.	2025

Theme	Ref	Action	Timeline
Training	5.8	Develop and deliver in-house biodiversity awareness training, which will be available to all officers and Members. This training could be delivered in conjunction with Highland school, college and university students.	2026
	5.9	Deliver training for the Council officers and Members on the implementation of NPF4 biodiversity policies and related local/national guidance.	2025
	5.10	Deliver ecology and biodiversity enhancement training for all officers involved with the design and implementation of capital projects (including new development, refurbishment and maintenance).	2025
	5.11	Investigate rollout of Building with Nature training across teams developing and delivering capital projects.	2025
Education	5.12	Work closely with Highland primary and secondary schools to identify areas of the school estate which could be enhanced for biodiversity and deliver both learning and wellbeing benefits.	2024-25
	5.13	Develop and rollout the Scottish Outdoor Access Code (SOAC) education box to provide education on the responsible access of the countryside.	2025
	5.14	Continue to support the education and outreach work of the High Life Highland Countryside Rangers and work with the Rangers to address the ecological emergency.	2025

GOAL 6: DATA MANAGEMENT

Data management is an increasing challenge in both the public and private sectors. Data that is accessible, up-to-date and inclusive is essential if we are to have a clear understanding of the current state of biodiversity across Highland and in the marine environment, define a baseline and measure progress. Access to high quality data is essential in enabling good decision-making; it ensures the right policies are developed and that development proposals utilize appropriate mitigation, compensation and enhancement strategies.

The Highland Biological Recording Group (HBRG), run by a small group of volunteers, currently manage the majority of Highlands' biological records. It is, however, recognised that an appropriately resourced and financially sustainable biological record, that can manage increasing volumes of data generated through development proposals and the public, is now required. 'The Better Biological Data Project' - a project funded by Scottish Government and NatureScot aims to provide open biodiversity data for all sectors and decision makers and find a sustainable model to enable this to happen. The Project recognises that there is an increasing urgency to establish a regional hub for the north and west of Scotland. The Council will work with partners including HBRG, University of Highlands and Islands and other local biological recording groups to coordinate and manage data sustainably over the long-term.

The Highland Council can also play a role in biodiversity data collection by raising awareness of data collection campaigns such as ShoreSearch and BirdTrack, and by engaging with community and volunteer groups that are collecting such data.

GOAL 6 ACTIONS: DATA MANAGEMENT

Theme	Ref	Action	Timeline
Data	6.1	Continue to support the Highland Biological Recording Group and other local recording groups.	Ongoing
	6.2	Support, with partners, and contribute to the development of the North-West Biological Data Hub as part the Better Biological Data Project.	2024 and ongoing
	6.3	Promote citizen science projects operating across Highland.	2025



Image: Hedgehog



The Highland Council

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