

GREATER GOOD

Our plan for a sustainable future

BIODIVERSITY STRATEGY 2024



GORDON DEWAR
CHIEF EXECUTIVE

“As an airport we realise how important it is to play our part in conserving biodiversity and reducing our impact on the things living around us, from animals and plants to fungi and micro-organisms.

The publication of our first Biodiversity Strategy supports our own Greater Good sustainability strategy and comes as the Scottish Government declares a nature emergency, with both the Government and City of Edinburgh Council publishing their own action plans committed to biodiversity protection.

Our strategy will align with these plans, which includes an ambition from the Scottish Government to be Nature Positive, and reversing the downward curve so that biodiversity levels are again increasing by 2030.

In order to achieve this, we all need to play our part in restoring and regenerating biodiversity, in turn allowing the natural environment, habitats, ecosystems, and species to thrive by increasing diversity, resilience and adaptability to climate change.

The UK Civil Aviation Authority (CAA) and Aviation Environment Federation recognises that airports can affect biodiversity in a number of different ways. Whether it’s the direct impact on habitat as airports and airfields develop, the management of wildlife for operational reasons, or the impact of light and noise pollution on some species.

While this all presents a challenge to the aviation industry, we understand the growing importance of incorporating these challenges into our business strategy, resulting in stronger policies and improved projects that consider biodiversity conservation at every step of the way. We have our own ambitious sustainability strategy and biodiversity is a key element of this.

This strategy will outline 3 themes of action we’ll be taking across the next two years to ensure negative biodiversity impacts caused directly by the airport’s operations are avoided or minimised, whilst enhancing biodiversity on and off our site where we are able to. These three themes are inspired by the mitigation hierarchy, which is a commonly used tool that encourages businesses to follow a set of principles to reduce negative impacts on biodiversity caused by development projects. As part of Edinburgh Airport’s long-term biodiversity strategy, we want to begin put mechanisms in place that will allow us to fully use this hierarchy method in the coming years.”

This is the Edinburgh Airport site, with the red line indicating the areas we can influence. This red line boundary contains areas used for modern development, areas we want to preserve for nature, and our river bodies. As you can see, we are relatively limited in space because much of the available land has already been built on or has been set aside for future expansion and development to improve the passenger experience. Nevertheless, it is also important to us to enhance and protect our natural environment and this will be a key aspect we will consider throughout any future land use changes.

This area has already undergone significant anthropogenic alteration, having previously been used for agriculture, mining, and military activities. Each of these land uses has left

its mark on the landscape, influencing both its physical structure and ecological value. A notable historical mark on our landscape can be seen on the map: The Cat Stane, a historic Bronze Age monument on our airfield. Restoring this land to a more natural state, incorporating native Scottish features, will necessitate a multiphase approach and several variations on our biodiversity strategy.

This strategy is the beginning of our biodiversity journey.



CONTEXT

This document sets out Edinburgh Airport's first biodiversity strategy and comes as the airport continues to build on its Greater Good sustainability strategy.

It outlines the measures the airport will take to foster a species-rich future, which is resilient to global environmental change. The strategy looks at the history of the airport and the land it operates on, examining current biodiversity across the campus, and assessing the challenges facing the aviation industry and beyond.

Edinburgh Airport is the busiest airport in Scotland with more than 15 million passengers expected to travel through the terminal in 2024, connecting passengers across the world and facilitating a wealth of leisure and business opportunities.

As the airport continues to grow, our Greater Good strategy highlights that this must be done in a sustainable way, not only mitigating the impacts of this growth on the environment around us but improving and enhancing this environment where we can.



OUR STRATEGY

HOW WE PLAN TO ENHANCE BIODIVERSITY

To enhance biodiversity on and around the airport campus we plan to take actions to:



Secure a species-rich future which is resilient to global environmental change



Work with our neighbours to meet local and global biodiversity goals and ambitions



Ensure the abundance and distribution of species is monitored and enhanced



Ensure the correct management of invasive species



Work with businesses and charities across the UK to share best practices and learn better ways to protect our complex natural environment



Make biodiversity a key component of our environmental policy and decision-making



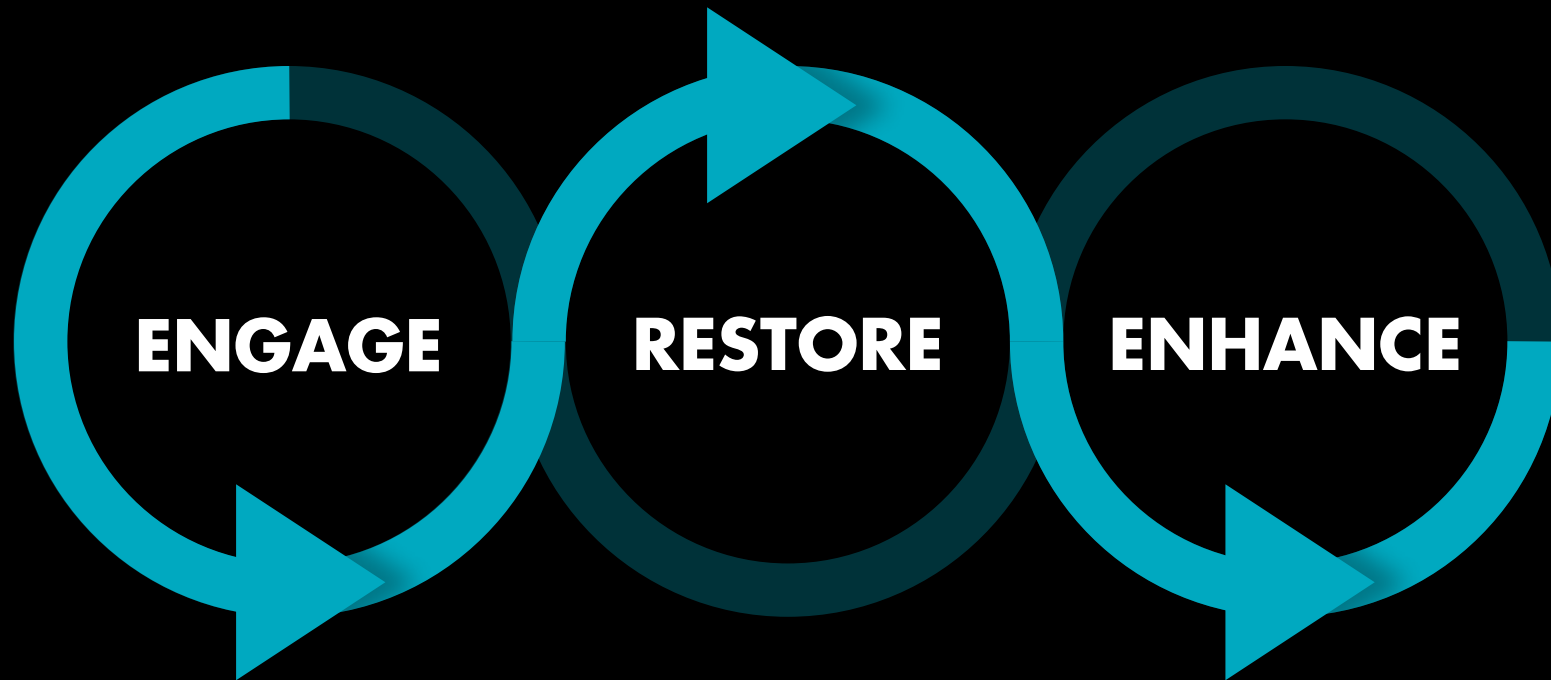
Educate staff on the importance of biodiversity protection

THREE KEY THEMES

Our strategy was developed as a two-year action plan outlining 3 specific areas of action. These are designed to help Edinburgh Airport improve biodiversity in our surrounding community. We understand that our biodiversity journey is just beginning with the first version of this first strategy, our action plan has been created to focus on the most important first steps, and tasks of the most urgent nature.

In future phases, we plan to develop a more comprehensive assessment of the impacts and dependencies of all airports activities on biodiversity.

Here we will share the vision the airport is working towards and the 3 key themes of biodiversity commitments we are making to get us there:



The three specific areas of action will begin to put mechanisms and processes in place which will allow Edinburgh Airport to follow the mitigation hierarchy in the future, which is our long term envision of this strategy.

Through our 'engage' actions we aim to put business processes in place to avoid any negative impacts on our on-site flora and fauna where possible and practical. If development on-site is likely to cause an impact, we will look to minimise this as much as possible. This will mean biodiversity impacts caused directly by the airport's operations are avoided or minimised, following steps one (avoidance) and two (minimise) of the mitigation hierarchy.

Both the 'enhance' and 'restore' actions were inspired by the restore level of the mitigation hierarchy. By enhancing and restoring our landscape we will re-establish destroyed species and enhance existing habitats which have already been impacted through our development.

When it comes to new developments, the strategy will allow us to follow the mitigation hierarchy fully in the coming years. Steps three and four will be developed through completing actions throughout our 'engage, enhance and restore' pillars, feeding into our overall target of increasing our biodiversity on and off-site where possible. Once we have a process in place, we will look to mitigate and repair any residual consequences. We will also look to off-set this impact either on-site or off-site, through investing in restoration or nature-based projects.



Avoidance

Ensuring Edinburgh Airport's projects and development **avoids any biodiversity impact** whatsoever (e.g. expanding on an already urbanised area, avoid expansion of footprint).



Minimise

This is applied to situations where complete avoidance is not possible. We will ensure Edinburgh Airport's projects go through an environmental assessment to identify any biodiversity impacts, and put in **mitigations where possible to reduce impact.**



Restore

Restorative actions are only implemented once an area has been damaged by a project or expansion. This can involve re-establishment of destroyed species to **enhancing existing habitats.**

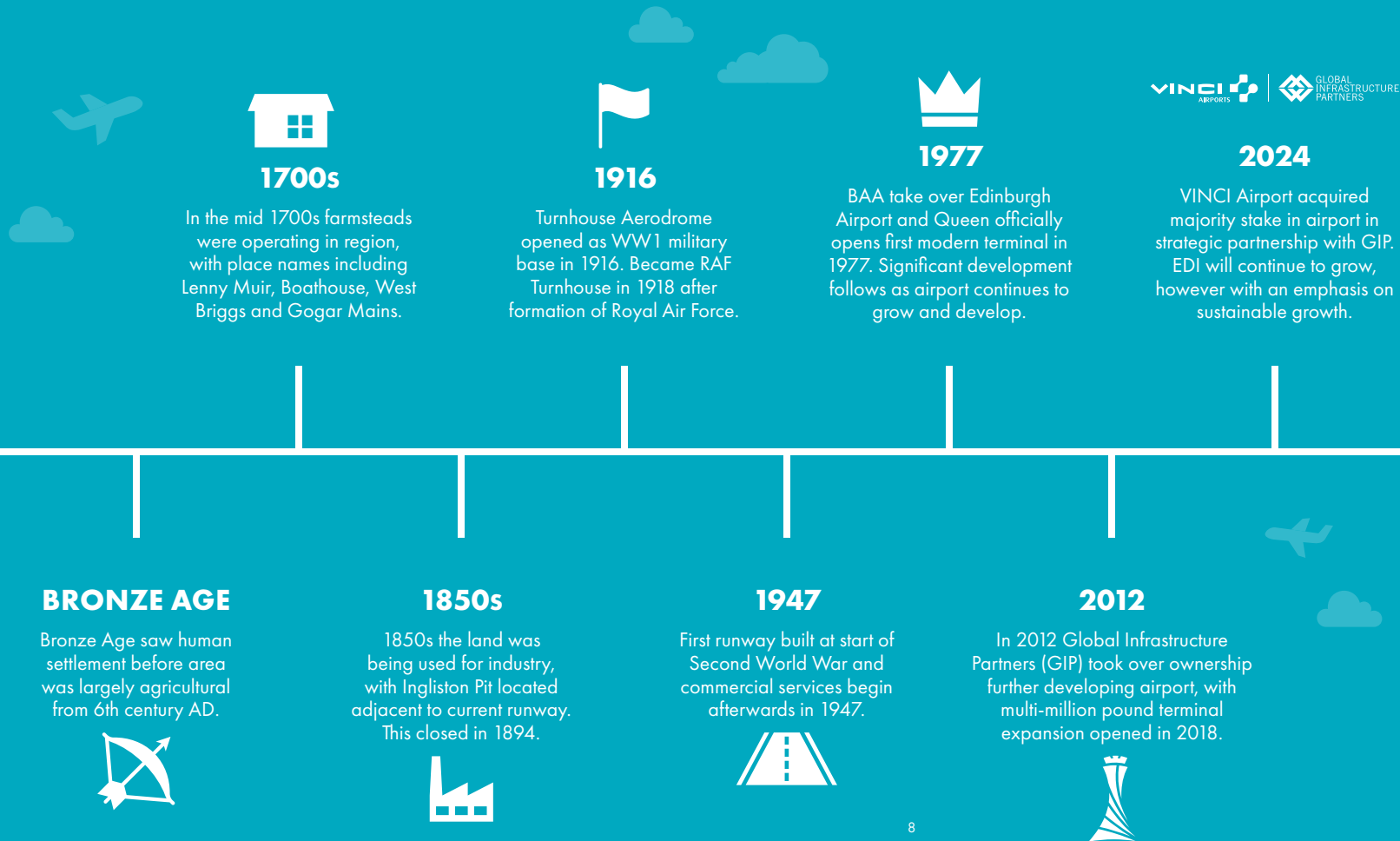


Offset

When a development damages nature (and this damage cannot be avoided or mitigated), Edinburgh Airport will ensure **new nature sites will be created** either on-site or off-site.

OUR JOURNEY

The land that the airport sits on has been worked, used and lived on by communities since the Bronze Age. By understanding its history, we are better placed to plan for its future.



The historical context means the land occupied by the airport would have received a relatively low score in terms of biodiversity, with the area used for agriculture, industrial and military purposes.

However in the future, and as the airport expands, there will be an emphasis on sharing its success with neighbouring communities by enhancing the local environment and introducing more natural and native features to the landscape. The enhancement of biodiversity is also anticipated to positively contribute to flood mitigation for the broader community.

BIODIVERSITY ACROSS OUR CAMPUS

We conducted a baseline survey in May 2023 to examine the presence and conservation status of natural habitats, fauna and flora species across the entire airport perimeter. We believe it is important to better understand our local environment and develop a strategy based on a comprehensive understanding of the site. This led to us establishing a 'biodiversity unit' for Edinburgh Airport.

BIODIVERSITY UNIT

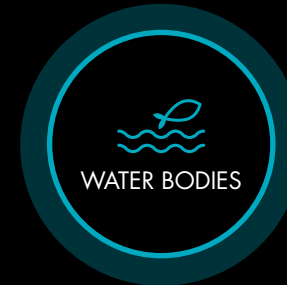
3629.85 ha

covered in our study, producing a Biodiversity Unit of

12,288.42 ha

This has been calculated in accordance with the methodology set out by the UK government - The Biodiversity Metric 4.0. A biodiversity unit shows the value of an area of land. This number is generated through a structured evaluation of habitat unit (habitat area, type and condition), distinctiveness, condition, strategic significance, risk and difficulty of creation/enhancement and time to target condition. Our highest overall scores come from natural and modified grassland areas due to their habitat size across campus, however there are also various priority habitats which we will aim to protect which are high in strategic significance. Priority habitats are those considered to be of most importance for biodiversity conservation.

Edinburgh Airport has five categories of priority habitats which we will aim to protect.



As part of our biodiversity plans we will track these habitat units each year and reports will be produced to show how we are progressing.

By maintaining and introducing more priority habitats, we aim to improve our biodiversity metrics and contribute to the creation and enhancement of habitats for the wildlife on our site.



WATER BODIES

- The airport marks the point at which the Gogar Burn joins the River Almond. The Almond runs almost parallel to the northern boundary of the airfield and comes under the responsibility of Edinburgh Airport at various points, and the Gogar runs around the terminal building and under the runway via a culvert. Both rivers can be impacted by airport activities and the airport has worked to improve the water quality of these river channels.
- The section of the Almond at the airport is vital for future fish migration, and already supports a variety of habitats and ecosystems, such as the otter. Brown trout and salmon are also seen rising frequently on the river. Edinburgh Airport has various outfalls on the River Almond and monitoring is carried out to ensure habitats are protected.
- The Almond itself flows into a Special Protection Area (SPAs) – selected to protect rare, threatened or vulnerable bird species – and a Ramsar site (the Firth of Forth) which is classified under the Convention on Wetlands of International Importance. There are also three Local Biodiversity Sites (LBS) nearby. These aim to ensure the conservation, maintenance, and enhancement of species and habitats of critical importance to nature conservation. These include the 'River Almond – Kirkliston to Edinburgh Airport LBS' and the 'River Almond – Edinburgh Airport to Cramond LBS' and there is hydrological connectivity between these and the 'Gogar Burn – Union Canal to Fairview LBS'.
- This strategy considers any negative impacts from the airport to LBSs, SPAs and Ramsar sites. For example by preventing pollution impacts or the potential spread of invasive plant species via the existing watercourses.
- The airport eliminates water from the airfield where possible as its presence attracts water birds which can increase the likelihood of a bird striking an aircraft. All watercourses are netted to prevent water-based birds from using the area and the banks of the Gogar Burn are kept free of tall vegetation which might provide cover for waterfowl (especially heron and mallard). These challenges make it difficult to enhance wildlife around our surrounding water bodies.





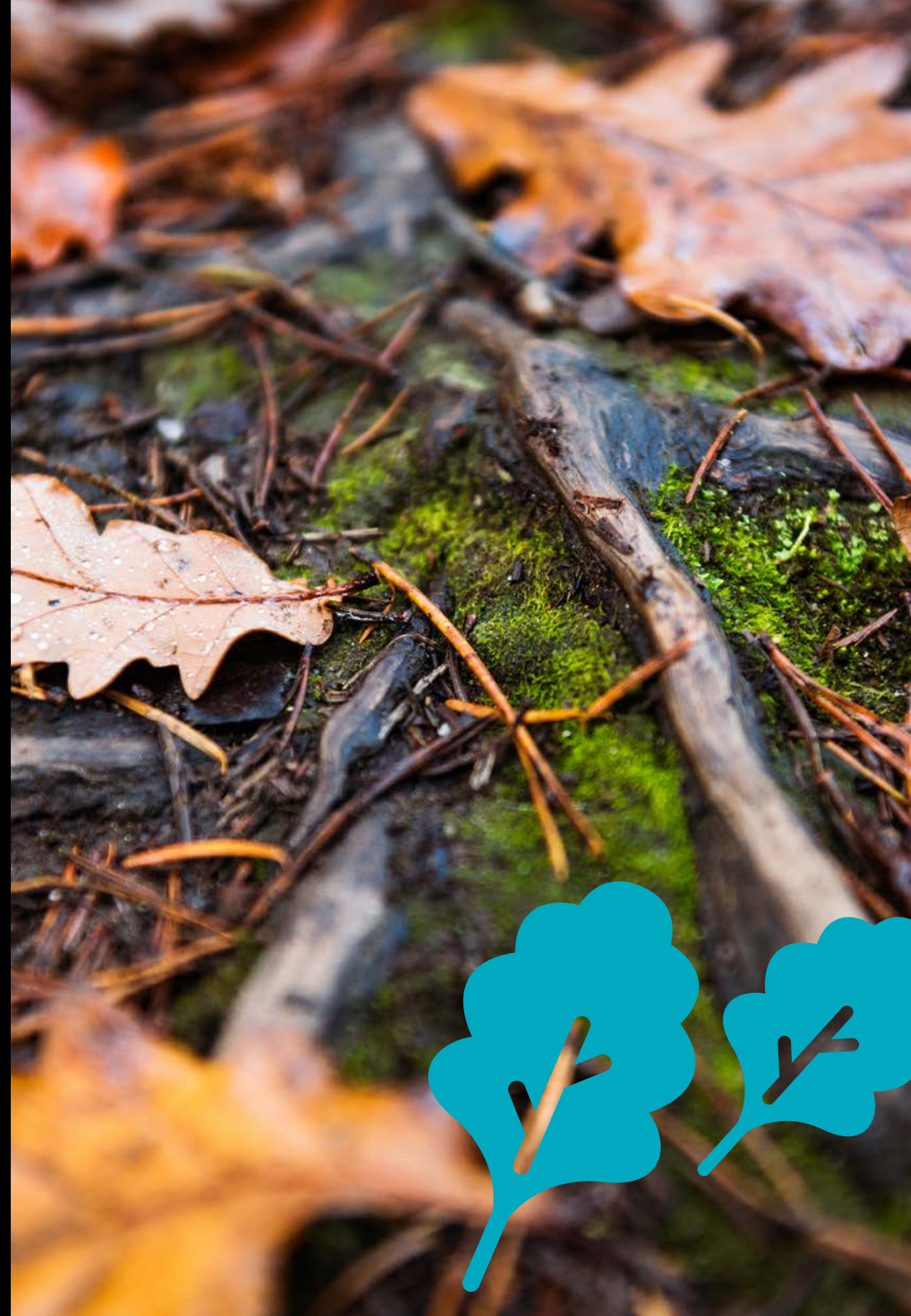
BROADLEAVED DECIDUOUS

- Areas of broadleaved woodland can be seen alongside the Gogar Burn and the age of these woodlands is mostly semi-mature to mature. Broadleaved woodland is distinguished by trees that lack needles - their leaves are broad and vary in shape, with the majority being deciduous. This means they go through a continuous process of losing and gaining leaves, allowing the woodland floor and understory to be as diverse as the canopy.
- Our canopy layer includes alder, willow, birch species and oak. The understory is variable in density and comprises bramble, immature willow and elder. The ground flora includes Rosebay Willowherb, Common Nettle, Creeping Buttercup, Comfrey, Broad Buckler Fern, Ground Ivy, Himalayan Balsam, Cock's Foot, Common Hogweed and Speedwell. The presence of invasive species in this area is something Edinburgh Airport would like to improve.



WET WOODLAND

- At the airport there is a section of wet woodland approximately 800m long by 25m deep. Wet woodland grows on poorly drained or seasonally wet ground on a variety of soil types, ranging from nutrient-rich mineral soils to acidic, nutrient-poor organic soils. These can contain various elements of many other ecosystems, and are an important habitat for a wide range of species.
- Within the airport it is likely that our otters find cover in these areas as it is common for otters to create breeding sites within wet woodland areas. Our canopy layer is dominated by alder and willow species, with occasional birch and oak species. There is an understory of immature willow and elder. The ground flora included frequent areas of dense bramble as well as grassland and herb dominated areas. Himalayan balsam and giant hogweed, which are invasive non-native species (INNS) are noted within the understory of both.





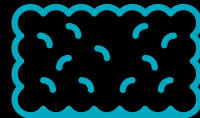
REEDBEDS

- Reedbeds are transitional habitats found between water and land and are almost entirely dominated by one species - common reed.
- These can support a diverse range of wildlife if they are of varying ages and structures. For example, damp areas can host various invertebrates, while species such as water voles burrow in drier spots, and it is also known that otters like to utilise the island areas.
- At Edinburgh Airport, one area of reedbed was noted amongst the scrub and woodland habitats. The habitat is dominated by common reeds with some additional herb growth between. We will look to expand this coverage in the future.



ON-SITE WILDLIFE

- When conducting our baseline survey we found that the airport has a number of furry and feathered residents which included the otter pictured, roe deer, herons, rabbits, badgers and many others. We will look at the ways we can enhance their habitats and make our airport even more welcoming for other species.



HEDGEROWS

- At the airport there is a hedgerow of beech, hawthorn and ash. Hedgerows can be classified into two types - managed hedges in which trees no longer take their natural shape, and relic hedges in which trees were planted as hedges but are no longer managed.
- They can be culturally and historically significant, provide landscape-scale connectivity, and make a significant contribution to preventing biodiversity decline. More than 1 kilometre of Edinburgh Airport's land was classified as a hedgerow, with one area being classified as a native hedgerow.



ENGAGE

01

Engage and educate staff on the importance of biodiversity by incorporating it into our Environmental Policy and Sustainability Strategy, as well as making it a key component of staff mandatory training.

Edinburgh Airport recognises the growing importance of incorporating biodiversity into its business strategy. With increased staff engagement, we anticipate that employees will actively seek ways to make a difference, volunteer and get involved in our localised projects. We also anticipate that there will be an increased emphasis on biodiversity impacts during the development of projects.

02

Invest in nature-based projects through a verified carbon credit scheme, to account for residual scope 1 and 2 emissions and business travel (scope 3) carbon emissions.

As part of our strategy, we will engage with a variety of local and/or international conservation or restoration projects. Investing in these projects will allow the organisation or group to deliver greater benefits, whilst also accounting for our emissions generated locally.

03

Carry out staff volunteering activities to help improve biodiversity within the wider community.

Edinburgh Airport will collaborate with local volunteering groups to create opportunities for our staff to engage in volunteer work. We are passionate about empowering our staff to step forward and make a meaningful impact during their designated funded volunteering days.

04

Develop a method for adopting the No Net Loss (NNL) approach for onsite expansion, in accordance with future government guidance.

Biodiversity compensation, either off-site or on-site, is not currently mandated by the Scottish Government; however, we are committed to voluntarily engaging with this biodiversity protection approach in the future. Over the next couple of years, we will develop a framework for implementing this practice on-site in anticipation of future governmental guidelines.



RESTORE

01

Introduce more diverse species on campus, working with local charities, organisations and businesses to carry out best practices.

We intend to incorporate more biodiversity features into Edinburgh Airport's landscape over the coming few years. Due to our complex environment and biodiversity-restrictions, we need to work with local charities, organisations, and businesses to help implement best practices and listen to suggestions on how to best return the landscape to include more native features. We also plan to collaborate with the City of Edinburgh Council to restore areas of interest that will help our community achieve its biodiversity goals.

02

Production of an Invasive Species Eradication and Control Strategy/ Action Plan.

Invasive species are a well-known problem around our airport. Although attempts have already been taken to address this, we will step up our efforts by collaborating with local groups to improve the overall condition of invasive species around our site, including areas along the Gogar Burn and River Almond.

03

Improve water quality in the Gogar Burn and River Almond to protect aquatic life, in line with SEPA's River Basin Management Plans (RBMP).

By 2027, we intend to improve the water quality of both the Gogar Burn and River Almond to protect aquatic ecosystems. To achieve this, we plan to redirect our contaminated water through a reedbed system, and we also plan to continue implementing source control measures during de-icer application. De-icer is known to be high in Biochemical Oxygen Demand (BOD) – high BOD leads to a more rapid depletion of oxygen in the waterway, resulting in decreased oxygen availability for aquatic organisms. Edinburgh Airport has already made significant progress in this area; however, to enhance our efforts further, we aim to treat our water to ensure a lower BOD level prior to its discharge.



ENHANCE

01

Continue to carry out bird mitigation and find new best practices.

By implementing various bird mitigation strategies in the area, we aim to deter birds from perceiving the airport as an appealing habitat, increasing their safety and protecting them from potential air traffic threats. While we adhere to standard practices within the aviation sector, we will also collaborate with bird specialists and other airports to explore potential improvements to our current practices.

02

Reduce the use of phytosanitary products (herbicides/pesticides) where possible.

The airport must comply with CAP 772, which mandates a minimal weed content to ensure overall airport safety. All grassed areas should be kept at least 95% weed-free whenever possible. If weeds appear to be growing, a herbicide spray should be considered to cover the areas of concern. Despite this, we are working to reduce the need for phytosanitary agents to near zero, in support of our shareholder's objective of zero pesticide use. We will use focused weed prevention strategies and explore alternative technologies and grass management techniques to support this goal. Previously,

the airport would apply herbicide for weed protection across a large area; however, a tailored herbicide action plan will help to reduce our overall usage.

03

Develop a plan to adapt our current infrastructure to improve fish migration by 2027, in line with SEPA's River Basin Management Plans (RBMP).

By 2027, we aim to improve the Gogar Burn's current condition to facilitate and enhance fish migration. Our plan involves adapting or removing man-made obstacles to fish migration, including improvements to our runway culvert and weir structures, which have been identified as barriers.

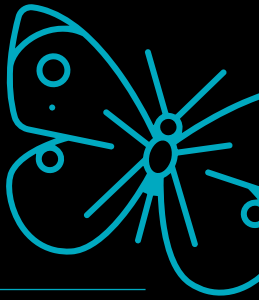
04

Protect our priority habitats on-site and enhance these features where possible.

Priority habitats in Scotland that are considered of most importance for biodiversity conservation. During our initial biodiversity survey, it was discovered that Edinburgh Airport has five categories of priority habitats which we will aim to protect: our waterways, broadleaved deciduous woodland, wet woodland, hedgerows and reedbeds.



THE FUTURE OF BIODIVERSITY AT EDINBURGH AIRPORT



THE CHALLENGES WE ARE FACING

DIVERSITY RESTRICTIONS – CAP 772

At Edinburgh Airport, we face the challenge of being subject to CAP 772 “Wildlife Hazard Management at Aerodromes,” which is a guidance document released by the UK Civil Aviation Authority (CAA). It focuses on reducing the risk of bird strikes at airports. Bird strikes, which occur when birds collide with airplanes, represent a substantial risk to aviation safety. CAP 772 contains comprehensive guidance and best practices for mitigating this risk. This means the presence of birds and wildlife near an active airfield is a significant challenge for airports, as CAP 772 restricts the levels of biodiversity permitted on-site.

Part of our safeguarding efforts, which are based around CAP 772, includes the management of grass species in order to avoid bird-attracting elements. Much of the airport’s land is non-permeable and is used by aircraft, passengers, and other vehicles however there are

sections of managed grassland around our operational areas. As part of CAP 772, the airport adopts a long grass policy, maintaining grass to a height of six to eight inches as a practical means of deterring birds attracted to short grass to rest or feed. Long grass inhibits bird visibility, increasing their vulnerability to predators and restricting access to food sources such as earthworms.

Effective grassland management involves controlling weeds which provide a habitat for various insects and, in turn, food sources for birds. Species of tree, bush and shrubs which encourage roosting, feeding or nesting birds also need to be controlled.

Nevertheless, there are landside areas – away from the airfield - which can play an important role in achieving our biodiversity goals and work has already begun to improve the biodiversity rating of these managed grasslands.

In spring 2023 and is part of an initiative of International Day for Biological

Diversity, a variety of native species commonly found in Scotland and northern England were introduced to the airport’s grounds. This was to transform the area, creating a brighter, more appealing welcome to visitors, while also providing diverse and much needed food sources for our indigenous pollinators.

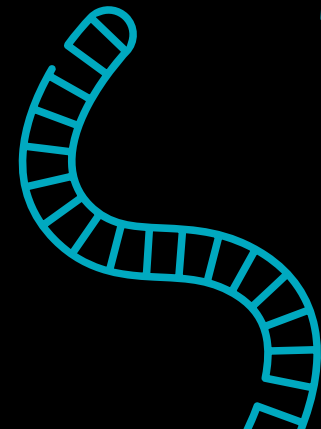
INVASIVE NON-NATIVE SPECIES (INNS)

Edinburgh Airport has a major challenge with invasive species growing outside their natural ranges and negatively impacting other organisms or environments. These species invade habitats, spread quickly, and outcompete native vegetation, starving them of food and resources.

At the airport practical efforts are put in place to tackle invasive species however Himalayan Balsam, Giant Hogweed and Japanese Knotweed present a continuous challenge, surrounding areas of the River Almond and Gogar Burn.

In Scotland these invasive plant species are among the leading contributors to

environmental damage and there is legislation in place to prevent their spread. As part of our strategy, we aim to manage this challenge more effectively in order to decrease the number of INNS present on-site.



NEXT STEPS & REPORTING ON OUR PROGRESS

Edinburgh Airport will share an update at the end of this strategy's period on the progress that's been made. This will be an opportunity to provide news about our operations, biodiversity initiatives and any ecological restoration activities we invest or participate in. The subsequent phases outlined in this strategy will be evaluated and determined in 2027.

The airport will continue to adapt to emerging biodiversity legislation from the Scottish Government, as well as accept any regulatory reporting requirements that emerge relating to biodiversity. Voluntary reporting and global initiatives, such as The Taskforce on Nature-related Financial Disclosures (TNFD), will also be considered. Edinburgh Airport will conduct a preparedness exercise to determine how this can be incorporated into future strategies, alongside target creation for the second phase of the scheme.





CONTACT DETAILS

Thank you for reading our report, if you have any questions, comments or feedback please email edcommunications@edinburghairport.com

For more information visit edinburghairport.com/GreaterGood