

Biodiversity Duty Report 2021-23

Introduction

Highlands and Islands Airports Limited (HIAL) is a public corporation wholly owned by the Scottish Ministers. The company operates and manages 11 airports at Barra, Benbecula, Campbeltown, Dundee, Islay, Inverness, Kirkwall, Stornoway, Sumburgh, Tiree and Wick John O'Groats.

HIAL's airports are vital to the social and economic welfare of the areas they serve and are supported by subsidies from the Scottish Government in accordance with Section 34 of the Civil Aviation Act 1982.

The company is headed by a Chief Executive Officer who is accountable to the HIAL Board. The Chief Executive Officer oversees the Senior Management Team and individual departments report to the Senior Management Team. Each airport has an Airport Manager who maintains responsibility for their individual site.

HIAL published a Sustainability Strategy and Environmental and Sustainability Policy Statement in 2023. Our Strategy is built around three key themes, each of which contain a number of pillars:



Theme 1 – Reducing our Environmental Impact

Pillar 1 – Waste Management

Pillar 2 – Water management

Pillar 3 – Energy Efficiency

Pillar 4 – Air Quality

Pillar 5 – Ecology and Landscape



Theme 2 – Supporting Our Communities and Our People

Pillar 6 – Our People

Pillar 7 – Our Communities

Pillar 8 – Noise

Pillar 9 – Surface Access



Theme 3 – Net Zero Aviation

Pillar 10 – Working in partnership with the wider aviation sector to achieve Net Zero

HIAL is responsible for a large estate that contains a significant amount of important flora and fauna. Much of this estate comprises large areas of grassland habitats with many sites adjacent to freshwater and marine environments. In addition, many of HIAL's sites are situated adjacent to, or within close proximity to, areas designated for their nature conservation. These include Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites and Marine Protected Areas (MPAs). These habitats support a wide range of wildlife including otters and bird assemblages. HIAL maintains close liaison with NatureScot, RSPB and other environmental bodies to ensure a balance is maintained between conservation and aircraft safety.

The presence of wildlife (birds and other animals) on and near an airport poses a serious threat to aircraft safety. Operators of European Aviation Safety Agency (EASA) certified and UK Civil Aviation Authority (CAA) certified and licensed airports are required to take the necessary actions to identify, manage and mitigate the risk to aircraft operations posed by wildlife. They are also required to adopt measures likely to minimise the risk of collisions to as low as reasonably practicable. HIAL is required to ensure that the airspace surrounding its airports is safe for aircraft use, at all times, and in particular to consider the potential for 'wildlife strikes' within 13 km of each airport. HIAL also comments on new developments that may lead to increased wildlife populations through the Local Planning system. The airports also work with local landowners to ensure that the risk presented by wildlife strikes does not increase significantly. It is important for HIAL to explore ways of delivering its biodiversity duty indirectly and off-site, as well as on-site where appropriate.

Biodiversity Duty Report

1. Actions to protect biodiversity and connect people with nature

Despite the safeguarding challenges and limitations that we face we understand the pressures facing nature and the importance of protecting biodiversity. Many of our airports are located adjacent to or within close proximity to areas designated for their nature conservation and these habitats support a wide range of wildlife.

HIAL's estate encompasses a broad and diverse range of habitats that support plants, invertebrates, fungi and small to large wildlife across all the airports.

Protecting the local environment around the airports remains one of the most important challenges facing HIAL, which requires balancing the significant socio-economic benefits of air travel with its environmental impacts.

Extended Phase 1 Habitat Surveys have been completed at all airports, allowing an ecological baseline to be established. In the coming years we will use this baseline information to support with the development of our Biodiversity Action Plan.

The diverse locations of our airports allow for a variety of biodiversity protection and enhancement projects.

Barra Airport

The operation at Barra is unique with its beach runways and landing strips. The river that is constrained to run alongside the edge of the airfield was prone to bursting its banks causing flooding of the airfield as well as depositing stones, earth and other materials onto the runway and causing a safety issue.

The implemented solution was to install a 330m wall formation of local rock to reinforce the river bank and reduce the likelihood of flooding whilst blending in with the surrounding area.

The team at Barra have also been in touch with the Bumblebee Conservation Group and are investigating the possibility of planting local plants and flowers around the airport to support the local bumblebees.

Benbecula Airport

Benbecula Airport has a long-grass policy to protect the scarce pyramidal orchids (*Anacamptis pyramidalis*) that grow on the airfield. These orchids are a pioneering species that usually favour old, semi-natural chalk and limestone grasslands; however, they are thought to be associated with the calcium-rich shell sand of the machair in the Outer Hebrides. The orchids attract several native pollinating moths and butterflies, including the six spot burnet moth (*Zygaena filipendulae*).



Biodiversity Duty Report

1. Actions to protect biodiversity and connect people with nature (continued)

Inverness Airport

We have created and maintain 'hare runs' at Inverness Airport to prevent injury to hares by directing them away from runways and taxiways.

In 2019 we commenced a macro-invertebrate sampling programme which we have continued. Sampling of macro-invertebrates is a highly effective method for providing an indication of the long-term health of a watercourse, unlike chemical sampling which only provides a snapshot at the time of sampling. Different families of macro-invertebrates have varying tolerance to pollution from sources such as nutrient enrichment, de-oxygenation or organic pollutants.

In 2023 we commenced an enhanced water sampling programme, allowing us to better understand the impact of both our own operations and external influences into the local water courses.

Islay Airport

In 2023 we began planning an adder monitoring and habitat creation project at Islay Airport, this will allow suitable habitats to be created in safe locations away from the terminal building. In 2023 one female and one male adder have been moved from around the airport buildings to safe places within the airport boundary. This project will be developed and progressed over the coming years.

We have also been working with the RSPB who have been undertaking wader surveys on ground around the airport this spring between mid-April and the end of May 2023.



Tiree Biodiversity Sign

We are currently also engaging with the RSPB exploring the potential for habitat creation for Little Tern at the airport. The possible use of crushed scallop shells as the medium, interspersed with patches of sand is being explored, with the majority of materials being sourced locally where possible. A number of information signs in regards to Little Terns and their nesting areas have been displayed around the airport boundary fence to try and reduce disturbance for any nesting Little Terns on the airport land. The ground conditions and lack of public access on our disused runway provides good nesting conditions for the birds, without compromising aviation safety.

The Invertebrate Conservation Trust have also been undertaking surveys for a project to conserve the Short-necked Oil Beetle and Northern Colletes mining bee. They were given permission to survey the dunes on and around airport land during May and July 2023.

The team have been engaging with Peatland Action and NatureScot to assess the possibility of undertaking peatland restoration works on non-operational land.

Kirkwall Airport

The team at Kirkwall Airport have been supporting the Orkney Native Wildlife Project by allowing the RSPB to place stoat traps around the aerodrome.

Stoats are not native to Orkney and pose a serious threat to the islands' native wildlife including the Orkney vole, hen harriers, curlews and Arctic terns.

Tiree Airport

Staff at Tiree Airport are working with the RSPB on their corncrake (*Crex crex*) breeding programme. A modified long-grass policy has been agreed with the UK CAA so that so that grass topping avoids the critical corncrake breeding season and is delayed until after 1st August each year. Monitoring of bird strike numbers will continue and the mitigation measures are evaluated annually to ensure public safety is not at risk.

Biodiversity Duty Report

2. Mainstreaming Biodiversity

Our airports encompass a broad and diverse range of habitats over a large physical area, and protecting these habitats and the wildlife they home whilst balancing the socio-economic benefits of air travel can be challenging. Environmental emissions from airports, water, air and noise can have detrimental effects on local habitats and species. We maintain close liaison with NatureScot, RSPB and other environmental bodies to ensure we balance conservation efforts with aircraft safety.

We dedicated a section of our Sustainability Strategy to protecting and enhancing the local ecology and landscapes and have committed to:

- Investigation biodiversity benchmark awards and opportunities
- Building on the findings of the Phase 1 Habitat Surveys to create a biodiversity strategy and ecology management plans for each airport
- Considering biodiversity improvements and opportunities during project development.

Based on the Sustainability Strategy, each airport has its own Environmental Management Plan (EMP). These detail notable habitats, protected areas and species present in the local vicinity. The EMPs detail how each airport captures its environmental impacts through an Aspect and Impact Register as well as any mitigations in place to reduce the negative impacts and enhance opportunities.

Across all airports, when embarking on any capital projects, biodiversity is a key consideration across all stages of the development works from procurement to design and build. Appropriate surveys, including ecological appraisals and pre-construction surveys for protected species such as badgers and otters will be carried out on construction projects to ensure that the works are not going to have an adverse impact on local wildlife. Where appropriate, suitable mitigation measures will also be put in place, for example works being planned to ensure timings avoid disturbing breeding and nesting birds.

Each airport has its own Wildlife Management Plan, the plans aim to reduce bird strikes and maintain a proactive approach to the management of wildlife and habitats. We are reviewing the way in which we report wildlife, allowing us to determine trends and periodically review any problem areas and update our risk assessments.

HIAL operates a long grass policy, where grass is maintained at heights between 150 and 200mm. As well as deterring certain bird species from our airfields, this policy also helps to protect native plant and insect populations.

We are currently reviewing current land use and future opportunities across our estate, this review will include the potential for habitat restoration and enhancement projects and nature based solutions to problems such as flooding and pollution.



Biodiversity Duty Report

3. Nature Based Solutions, Climate Change and Biodiversity

In April 2019, Scotland's First Minister formally recognised a global climate emergency. Since then, a new Climate Change Act has been adopted by the Scottish Parliament setting a net-zero emissions target for all greenhouse gases by 2045.

Across many of our airports we have already started to see the impacts of climate change. Coastal erosion has been observed at Barra, Benbecula, Islay, Stornoway and Tiree. As well as continued monitoring, hard engineering solutions and the planting of marram grass has taken place to help stabilize the dunes.

In 2023 we created Climate Change Risk Assessments for all airports, looking not only at current risks but also risks we may face in the future as a result of a changing climate. The aviation industry is highly sensitive to climate-related hazards and resultant climate vulnerabilities and risks have the potential to

cause severe disruption to airport operations, delays for passengers, and, ultimately, reductions in the safety of aircraft. The most recent Intergovernmental Panel on Climate Change (IPCC) assessment report states that countries nationally determined contributions (NDCs) make it likely that warming will exceed 1.5°C during the 21st century, with every additional increment of global warming increasing extreme events. Our airports provide a lifeline service to communities and businesses across Scotland's Highlands and Islands, and it is essential for us to ensure that our operations, infrastructure, and strategic functions are resilient to climate variability and change. We will continue to work with public and private sector organisations to understand, mitigate and adapt to future climate risks and where possible implement nature based solutions.



Stornoway

Biodiversity Duty Report

4. Workforce Development

Our people lie at the heart of HIAL and are responsible for ensuring we operate a safe, welcoming airport network to the very highest professional standards. Our goal is to create a positive working environment focused on the wellbeing of our people and an effective work-life balance.

In 2023 we introduced mandatory environmental awareness training to all of our staff, helping to raise awareness of our sustainability strategy and ensure that all staff were aware of the role they had to play in helping us to deliver our objectives. The training package includes a topic on biodiversity and highlights some of the unique species that live on and around some of our airfields.

Engagement with our staff on environmental issues, including biodiversity, is key to us achieving our environmental goals and we have worked hard to improve how we communicate with our people. We have a dedicated section within our monthly newsletter which has included information on Marine Week and encouraging staff to spend time outdoors and contribute to citizen science through joining beach cleans, water pollution, spotting greenwashing, climate change and practical tips on how they can reduce their environmental impacts at home as well as at work.

We encourage our staff to volunteer and reward them with two paid days leave each year.

We are proud of the role we play in our local communities, our airports support lifeline services for our local communities and support social benefit and economic prosperity for the communities we serve.

5. Research and Monitoring

Three times per year a local ecologist comes on-site at Inverness Airport to conduct macroinvertebrate sampling. These samples allow us to understand the macroinvertebrates living in and around the airport as well as comparing with previous visits to allow us to identify any trends in water quality.

Sampling of benthic macro-invertebrates is a highly effective method for providing an indication of the long-term health of a watercourse, unlike chemical sampling which only provides a snapshot at the time of sampling.

The un-named tributary of the Burn of Ardersier has been significantly canalised throughout its length and no longer resembles a “natural” watercourse which will in itself have a negative impact on the classification at all sites by reducing available habitat and flow types compared to its natural state and thereby limiting macroinvertebrate diversity. Most recent results have found that water quality is significantly degraded before entering the airport, further work will take place over the coming years to better understand the local water courses and identify opportunities for improvements.

We recognise that in order to understand our local biodiversity and identify opportunities for improvement we need to work in partnership with others.

We engage with other airport operators and are members of various local and national groups and forums.

6. Biodiversity Highlights and Challenges

The biggest challenge that HIAL faces with regard to biodiversity is ensuring that wildlife does not pose a risk to aircraft safety, both within the airfield environment and the 13km of surrounding airspace.

The European Aviation Safety Agency (EASA) and the UK Civil Aviation Authority (CAA) impose requirements on certificated and licensed airports to adopt measures to minimise the likelihood of collisions between wildlife and aircraft and we must follow the guidance set out in CAP 772 “Wildlife Hazard Management at Aerodromes”, providing information on how to establish and maintain an effective bird and wildlife control management plan.

However, there are also many opportunities for us to help improve biodiversity and support with achieving wider goals and targets. Our airports cover vast areas of land, we are currently reviewing our current and future requirements and considering potential biodiversity opportunities.

Working closely with our Safeguarding team and others, both internally and externally, will allow us to develop biodiversity opportunities that support restoration and enhancement without increasing the risk to aircraft safety.

