



State of Nature South of Scotland

APRIL 2026



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Introduction

The State of Nature South of Scotland represents, for the first time ever, an outline of the biodiversity of Dumfries & Galloway and the Scottish Borders, together with the main changes affecting the nature of the South of Scotland from 2000 to 2025. It is entirely evidence-based, drawing on the best available data.

The report quantifies the status and trends for biodiversity in the region. It is an important element of the South of Scotland Regional Land Use Framework, enabling future monitoring of its efficacy with regard to biodiversity. The Regional Land Use Framework (RLUF) was developed under the Regional Land Use Partnership (RLUP) pilot, following a period of extensive stakeholder engagement. The pilot was co-ordinated by South of Scotland Enterprise (SOSE) in partnership with Dumfries & Galloway Council and Scottish Borders Council, overseen by the Regional Economic Partnership (RLUP). The RLUP is now in a transitional phase as part of a Scottish Government national initiative.

The State of Nature can be used to increase understanding of recent changes to species, habitats and ecosystems and to plan future land use policies. It draws heavily on the millions of records collected, collated, verified and stored by the two local environmental records centres in the South of Scotland – The Wildlife Information Centre (TWIC) covering Scottish Borders, and South West Scotland Environmental Information Centre (SWSEIC) covering Dumfries & Galloway. It also makes use of the information gathered by many local and national organisations, most of it collected by thousands of volunteers who willingly donate their considerable time and skills to wildlife recording.

This report has been commissioned by South of Scotland Enterprise on behalf of the RLUP; and prepared by Southern Uplands Partnership Services Ltd, with the support of NatureScot, Scottish Borders Council and Dumfries & Galloway Council.

It is intended that the State of Nature South of Scotland will be updated and added to in future years.



Headlines

Due to limited data availability, only a limited number of metrics have been included in this report. Headlines for each metric are shown below and summary information is provided for each of them in the report (p12-22). However, for full details of how the metrics were selected, as well as greater detail on each of them, please refer to the associated State of Nature Data Report.

Click on any box to go to the relevant page.

This report contains 11 metrics that illustrate the current state of nature in the South of Scotland.



15 out of 16 species breeding seabirds declined in abundance from 2000 to 2021.



Total count of wintering waterbirds down by 8.8% from 2005 to 2025.



Threatened breeding birds - 22 species declined, 17 species increased in distribution from 1968-72 to 2008-11.



Data suggests that all 3 threatened mammal species are in decline.



No significant change in the distribution of threatened larger moths.



5745 native species have not been seen for 25 years or more, 2617 species have been seen for the first time since 2000.



Numbers of invasive non-native species increased from 66 to 88 species from 2000-04 to 2020-24.



Mosses and liverworts indicate increasing summer temperatures and increasing nitrogen pollution.



Seagrass Beds are recovering and expanding.



Woodland creation under the Forestry Grant Scheme since 2015 in the South of Scotland consisted of more than 80% conifers.



The proportion of features in favourable condition on designated sites was assessed at 70% in 2025.



Historical Changes

There is a long history of changes to the nature of the South of Scotland prior to the period covered by this report. Rarely is historical data available to analyse historical trends in detail, but numerous publications based on personal experiences, anecdotal evidence or fragmentary data, have helped to document change. A generalised timeline for the South of Scotland, with a few examples, can be summarised as follows.

- Prehistoric Period: Removal of most of the natural woodland. Peatland formation due to climatic changes. First farming during the Neolithic period.
- Medieval Period: Hunting a widely practiced land-use including Ettrick Forest and Forest of Annandale (not necessarily wooded). Early species introductions, such as Fallow Deer and Rabbits.
- 17th to 19th centuries: Widespread and radical landscape changes resulting from the Agricultural Revolution, affecting many semi-natural habitats and species. Other than textiles and woodland industries, there was less impact from industry and urbanisation in the South of Scotland than in other parts of Britain. Railways replace horses as the dominant form of transport.
- 20th century: Continued intensification and mechanisation of agriculture. Widespread afforestation from the middle of the century. Roads become the dominant form of transport.

The Missing Data

This report makes best possible use of the data available, however, we recognise that there are some significant gaps in the availability of data. Though the UK has a longer history of biological recording than any other country in the world, data of sufficient quantity and quality is either not available or has not been analysed in sufficient detail to provide accurate trends on all ecosystems, habitats and species. For these reasons, we have been unable to report in detail on several species groups, including fungi, fish, flowering plants and many invertebrates.

Similarly, national recording and monitoring schemes, such as the Breeding Bird Survey, National Plant Monitoring Scheme, National Bat Monitoring Programme, National Amphibian and Reptile Monitoring Programme, the Pollinator Monitoring Scheme and many others, provide valuable information at a UK or Scottish level but, due to the limited number of sample sites in the South of Scotland, the results are rarely statistically valid locally.

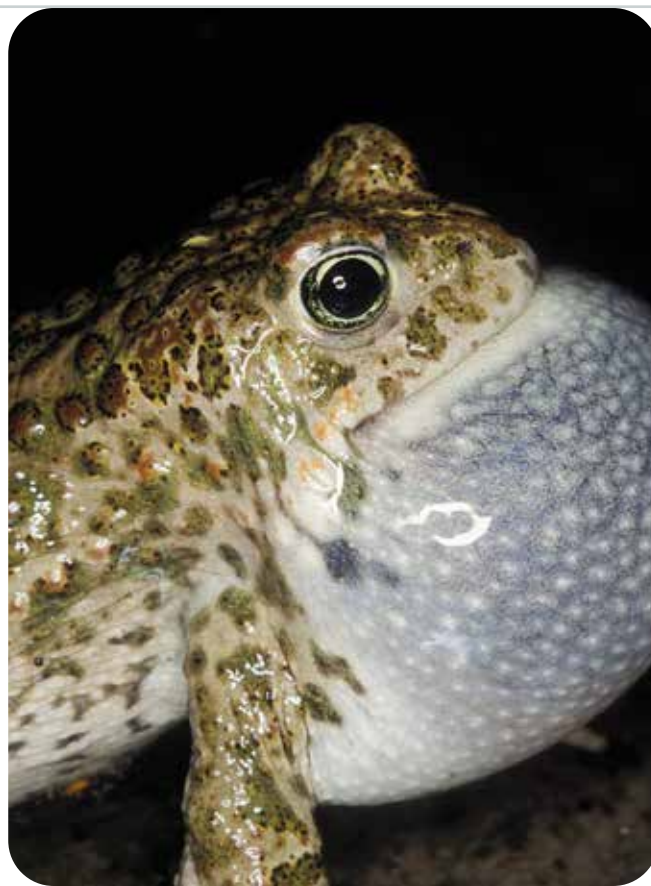


The Nature of the South of Scotland

What's important about the South of Scotland's Biodiversity?

With a wealth of unique and diverse landscapes and nature, it is not possible to fully detail everything that is important about nature in the South of Scotland in a short report. However, key highlights include:

- The Solway is one of the most important sites for waterbirds in the UK.
- St Abb's Head is one of the UK's largest seabird colonies.
- There are two colonies of Northern Gannet out of less than 60 in the world.
- The River Tweed is globally celebrated for its Atlantic Salmon, and diverse fish populations are found in other freshwaters.
- 38% of Scotland's saltmarshes are in the South of Scotland, including three of the largest sites at Caerlaverock, Kirkconnell Merse and Wigtown Merse.
- The South of Scotland includes the nationally and internationally important Borders fens and mires, and important concentrations of raised bogs.
- If fully restored, Lochar Moss would be one of the largest raised bog complexes in western Europe.
- The Solway supports the only Natterjack Toad colonies in Scotland.
- There is a greater diversity of bats and butterflies & moths in the South of Scotland than anywhere else in Scotland.
- Rare species, such as Tadpole Shrimp, Vendace and Esthwaite Waterweed, are found in just a handful of other sites in Britain and Ireland.
- Loch Ryan supports the only active fishery for Native Oysters in Scotland.



What Nature does for us - Ecosystem Services

In addition to its intrinsic value, nature provides a wide range of ecosystem services that benefit people.

Nature is essential for human life. It provides us with water, clean air and food, and raw materials for medicines, industry and buildings. Our crops rely on insect pollination and the complex biological processes that create soil. Enjoying parks, landscapes and wildlife improves our health and well-being. All these benefits, known as ecosystem services, depend on a healthy environment.

Ecosystem services have been categorised into groups consisting of provisional, regulating, cultural, and supporting services. Provisioning services include food and drink, natural medicines, water supply, materials and energy. Regulating services include clean air, carbon storage, flood management, erosion control, water purification, disease and natural pest control and pollination, supporting services include healthy soils, photosynthesis, and nutrient cycling. Cultural services include spiritual and religious connections, inspiration, sense of place, recreation, tourism, cultural heritage, knowledge and learning, and physical health and mental wellbeing. Underpinning all these services is biodiversity.

It is very difficult to put an economic value on nature and the services it provides in the South Scotland. The UK Ecosystem Assessment (2011) shows that since the 1950s, changes to the natural environment have led to a decline in the overall benefits from nature. The National Security Assessment on Global Ecosystems has analysed how global biodiversity loss and ecosystem collapse could affect UK national security.



Where is the South of Scotland's Biodiversity?

Habitats

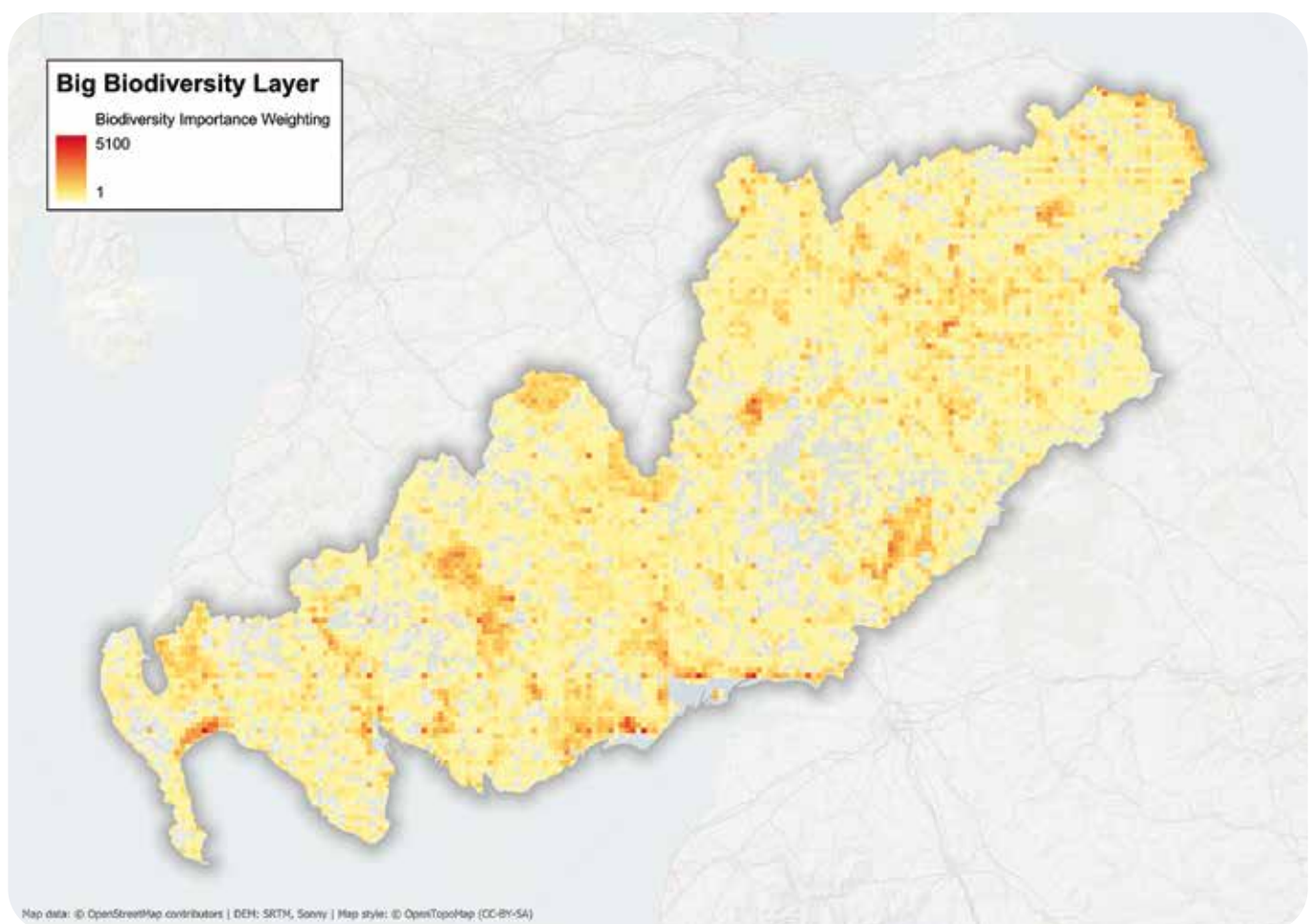
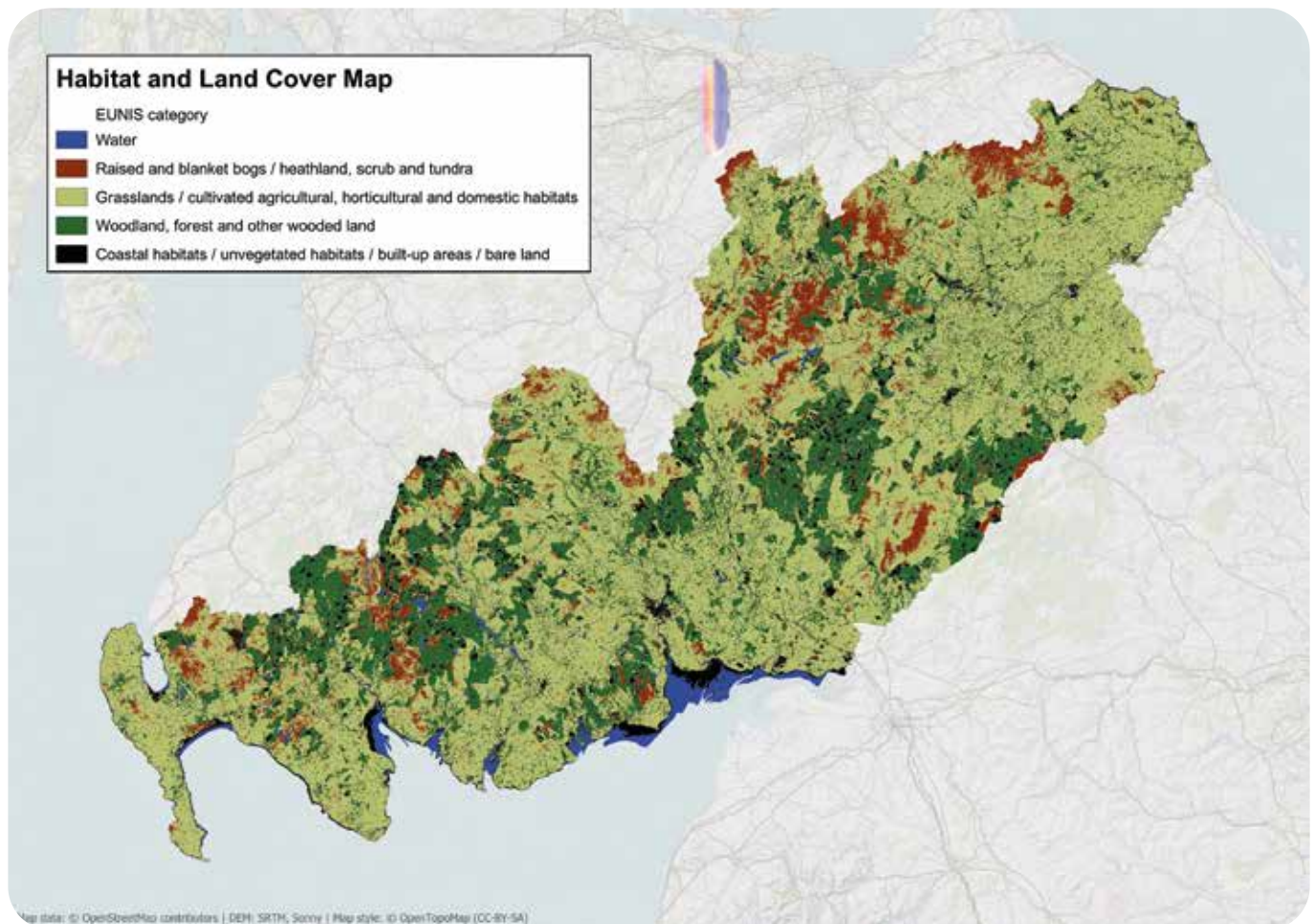
The Scotland National Land Cover Map 2022 (page 9), which uses data from satellite and radar sources and classifies habitats according to the European Nature Information System (EUNIS), provides information on the habitats and land-use of the whole of the South of Scotland. At its broadest scale (EUNIS Level 1) the map shows the South of Scotland to be dominated by grasslands (61%), predominantly agricultural grasslands managed as improved pasture, silage (mainly in the west) or cereals (mainly in the east). The second commonest habitat is woodland (22%), predominantly coniferous plantation, with strong concentrations in Galloway, in Eskdalemuir and Craik Forests on the border between Dumfries & Galloway and Scottish Borders, and in Wauchope Forest, bordering Northumberland (note that the category does not include clear-felled or windthrow forestry, indicating this habitat category is likely underestimated). Raised and blanket bogs, together with heathland (9%), is less extensive and found mainly in upland areas, with concentrations in the Lammermuir, Moorfoot and Tweedsmuir Hills, but does not include former bogs or heathland now afforested or covered in other vegetation.

Rare, threatened and endangered species and habitats

The South of Scotland supports many species and habitats that are recognised as rare, threatened or endangered. The distribution of these is shown on the Big Biodiversity Layer One heat map, prepared by NatureScot.

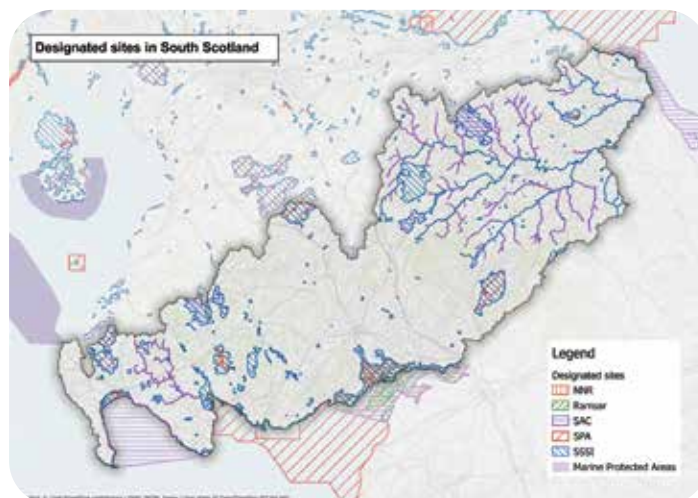
The map on page 9 shows biodiversity hotspots clustered around designated sites (see following section), including the Berwickshire coast, the Moffat and Langholm Hills, the inner Solway and the head of Luce Bay. Several of the river valleys also stand out, including the mid-Tweed, the lower Nith, the upper Ken-Dee and the Cree. The areas with lowest biodiversity weighting are those of dense forestry on the Scottish Borders/Dumfries & Galloway border, and in central Galloway. This may in part reflect difficult access and lack of recording effort.





Protecting Nature - designated sites

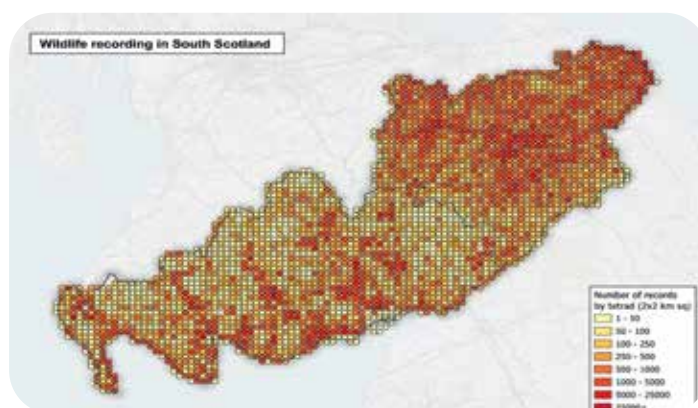
Designated sites are areas of land protected from certain activities to safeguard their natural heritage. Statutory protection arises from international directives and treaties and/or domestic legislation and policy. As of December 2025, in the South of Scotland there were 185 Sites of Special Scientific Interest (SSSI), 3 National Nature Reserves (NNR), 22 Special Areas of Conservation (SAC), 10 Special Areas of Conservation (SPA), 8 Ramsar Sites and 1 Marine Protected Area (MPA). Some sites have multiple designations.



There is also a range of non-statutory designated sites including Local Wildlife Sites in Dumfries & Galloway and Local Biodiversity Sites in the Scottish Borders. Nature Reserves, operated by conservation organisations and community groups include a mix of statutory and non-statutory designations. Examples include the Berwickshire Marine Reserve and the Tarras Valley Nature Reserve.

Wildlife Recording in the South of Scotland

Wildlife recording in the South of Scotland, much of it carried out by volunteers, has continued to increase during the period covered by this report, both in terms of the number of people involved, the number of taxa recorded, and the number of records submitted. This may affect datasets that have not been adjusted for recorder effort.



The number of records submitted to the two local environmental records centres (LERCs) in the South of Scotland, totalled more than 800,000 in 2015-19. There was a slight drop-off in the subsequent five-year period due to access restrictions arising from the COVID-19 pandemic, but the overall trend is strongly upwards.

Restoring Nature - habitat restoration

The best and most cost-effective way of helping biodiversity in the South of Scotland is to look after what we have but there is an increasing number of projects that are demonstrating how we can restore habitats lost or degraded from past human activities, even if they were hundreds of years ago.



Case Study: Eddleston Water

The Eddleston Water, a tributary of the River Tweed, is the subject of a project to assess the long-term effectiveness of natural flood management techniques to reduce flood risk to downstream communities and improve wetland habitats for wildlife. It uses techniques such as river re-meandering, tree planting, installation of large wood structures and the creation of new wetlands. It is restoring some of the natural characteristics of a typical Scottish river system.



Case Study: Carrifran Wildwood

Carrifran Valley, a 660 ha former sheep farm in the Moffat Hills, was bought by Borders Forest Trust in January 2000 to restore a lost postglacial woodland ecosystem. Planting of over 750,000 native trees and shrubs has created diverse lower-level woodlands, and rare high-altitude montane scrub at 700 metres. Removing grazing pressure has aided rapid growth and recovery; tall herb vegetation, river gravel flora, and heather and alpine heath now flourish. Peatlands are restored and revegetating. Red squirrels and pine martens appear occasionally. Bird diversity and abundance has increased markedly.

Breeding Seabirds



The UK supports globally important numbers of seabirds and around 60,000 birds were counted in the South of Scotland in the most recent survey. Historical evidence however indicates greater numbers in the 20th century.

The data from the two most recent national seabird censuses in 2000-04 and 2016-21 shows a decline in abundance of 24% across all species and a decline in abundance for 15 out of 16 species. The most recent counts pre-date the main outbreaks of Highly Pathogenic Avian Influenza (avian flu) so may underestimate the decline.

Terns have declined substantially and may now be extinct, or very nearly so, as breeding birds in the South of Scotland. No comprehensive data exists on the increase in urban nesting gulls, but there has been a substantial decline at their coastal breeding sites, especially of Kittiwakes (down 69%), none of which breed in urban areas in the South of Scotland. Auk numbers (down 5.5%) have not declined as severely as other species, whilst a small second colony of Gannets was established, and overall numbers remained steady or increased.

The main drivers of seabird trends, other than avian flu, are likely to be related to the marine environment where all these species, other than some of the gulls, find all their food and spend almost all their lives.



Case Study: St Abb's NNR

St Abb's National Nature Reserve on the Berwickshire coast has a long history of seabird monitoring. Monitoring by National Trust for Scotland from 2020 to 2025 provides more up to date information than the national seabird censuses and includes the main outbreak of avian flu. The data shows 5 species declining (from 2% to 66%) and 2 increasing, including Kittiwake (up 12%) and a rapid increase in the Gannet colony from 14 nests in 2020 to 132 nests in 2025.

Wintering Waterbirds



The Wetland Bird Survey (WeBS), begun in 1993, provides comprehensive monitoring of waterbird numbers wintering at all the main sites across the UK, and is mostly undertaken by volunteers. The South of Scotland has several sites that support wintering waterbirds in numbers that are nationally or internationally important.

The abundance of wintering wetland birds (wildfowl and waders but excluding gulls and terns) calculated using the maximum monthly count at regularly monitored sites, averaged over five-year periods from 2005 to 2025, shows a decline at 27 sites and an increase at 9 sites. Overall numbers of birds at these sites fell from 228,251 birds in 2005-10 to 208,169 in 2020-25, a decrease of 8.8%.

Multiple factors can affect the number of wintering waterbirds, including site-specific changes, such as increased disturbance, changes in water quality or new development, but also national and international issues, such

changes in migration patterns caused by climate change or factors affecting the birds on their breeding grounds.



Case Study: Little Egret

Little Egret, a small white member of the heron family, is one of the success stories of the 21st century. From being a rare visitor in 2000, they are now recorded on many sites during WeBS counts and have even reached nationally important numbers. Climate change is the likely reason for the increase.

Threatened Breeding Bird Species



The distribution by hectad (10km x 10km Ordnance Survey grid squares), of threatened breeding bird species in the South of Scotland between 1968 and 2011 has been analysed. Threatened bird species are those identified on the Birds of Conservation Concern Red List (2021). Distribution data was based on that collected for the three national atlas periods covering 1968-72, 1988-91 and 2007-11.

The results showed a decline in the distribution for 22 species and an increase in distribution for 17 species between 1968-72 and 2008-11. Declines ranged from 2% (Lapwing) to 100% (Hawfinch), increases from 2% (Grasshopper Warbler) to 34% (Herring Gull).

Multiple factors can affect the distribution of breeding birds, and these will vary significantly according to species. Factors can include site-specific changes, such as increased disturbance or new developments, but the impact of site-specific changes will rarely affect the regional distribution of a breeding bird species. Of

greater impact is likely to be wider economic factors or changes in technology or policy that result in cumulative impacts on widespread habitats such as farmland, forestry or uplands. Breeding birds are also affected by national and international issues, such as climate change, or (for migratory species) factors affecting the birds on their wintering grounds.



Case Study: Corn Bunting

Corn Bunting, with its close affinity to arable land, was once a widespread farmland bird in the South Scotland. A decline was already evident by the time of the first national atlas (1968-72) and has accelerated since then. Corn Bunting may now be extinct as a breeding bird in the South of Scotland.

Threatened Mammal Species



There are three threatened mammal species in the South of Scotland, as defined by The Mammal Society UK Red List (2021), Hedgehog, Water Vole and Red Squirrel.

Data on Water Voles in the South of Scotland is insufficient to identify recent trends. It is a rare species with fewer than 150 total records for the South of Scotland. National trends report a continuing decline.

Hedgehogs are known to be widespread in the South of Scotland but available data on distribution is limited. Available records suggest a decline in distribution in the most recent years. National trends report stable populations in urban areas but a declining rural population.

Since 2000, a substantial volume of data has been collected on Red Squirrels. Analysis of

distribution by tetrad (2km x 2km Ordnance Survey grid squares) between 2000 and 2024 shows an expansion of Red Squirrel distribution up to 2020, followed by a subsequent retraction.

Reasons for national Hedgehog declines are complex, but changes to the rural environment along with the impact of increasing Badger numbers and road traffic may be important. Red Squirrels and Water Voles have also been affected by habitat changes, but the impact of two invasive non-native species has been identified as important reasons in their decline. With Red Squirrels, competition with Grey Squirrels and squirrelpox virus, which can be carried by Grey Squirrels, has been identified as a major factor for decline. For Water Voles, direct predation by American Mink has been identified as a significant cause of decline.

Threatened Macro-moth Species



The distribution of threatened moth species (as defined in the UK Red List 2019) in the South of Scotland between 2003 and 2022 has been analysed, based on the number of records for each species in each hectad (10km x 10km Ordnance Survey grid square).

The data shows some species increasing, some species decreasing, and others showing fluctuating trends. Highly localised species in the South of Scotland, such as V-moth and Spinach remain rare and Figure of Eight, never known to be widespread, may now be extinct. Oak Hook-tip has recently colonised Dumfries and Galloway and continues to expand.

Overall, the variations lie within a range that could be explained by recording effort, and no obvious trends have been identified. This is in line with national trends, which identify most serious declines to be concentrated in the south of Britain, associated with land use change, chemical and light pollution. Threatened moths have not benefitted from climate change in the same way as many common species, since a lack of suitable habitat may prevent colonisation of new sites, even if the climate becomes suitable.

Note the data covers the distribution of those species considered threatened at a British level, which is a very small number (20) compared to the total number of macro moth species (almost 500) recorded in the South of Scotland.



Case Study: Broom Moth

The Broom Moth, an attractive species associated with the plant Broom, demonstrates the difficulty in identifying a clear trend. In the South of Scotland, it decreased from 313 records in 2003-07 to 199 in 2008-12, back to 487 in 2013-17, then 255 in 2018-32.

Species Lost, Species Gained, Species Regained



Analysis of records held by the local environmental records centres (LERCs) has identified a total of 5745 native species previously recorded in the South of Scotland but not since 2000. Species groups with the most 'lost' species (over 200 species each) include fungi, beetles, true flies and lichens. There are many reasons why a 'lost' species may not actually be lost from the South of Scotland, but the analysis provides a guide to those species at risk of local extinction or those that require further work to confirm their continued presence.

The analysis has also identified a total of 2617 'new' species recorded for the first time in the South of Scotland since 2000. Some may have been here for many years but only recently discovered, others may be infrequent visitors and will never become established. However, several species groups are sufficiently well monitored to enable identification of genuinely newly established species. These include several butterflies, dragonflies, grasshoppers & crickets, and some flowering plants.

There are many reasons for losses and gains, including land-use change, pollution, accidental or deliberate introduction, human transport and climate change.



Species regained Case Study: Tadpole Shrimp

The Tadpole Shrimp, one of the oldest known animal species in the world, demonstrates how the fortunes of a species can change. Historically known in the UK only from the New Forest and the Scottish Solway Coast, the Solway population was thought lost due to erosion, with no records after 1948. Remarkably it was discovered at a different Solway site at Caerlaverock in 2008. And through a species conservation programme, Species on the Edge, it has now been reintroduced to its former site at Mersehead.

Unwelcome Arrivals - Invasive non-native species



Non-native species have been introduced to Britain by people for thousands of years and have arrived through many different pathways, sometimes deliberate, sometimes accidental. Only a small proportion of them have become invasive due to their impact on the environment or the economy.

Data from the South of Scotland relating to invasive non-native species (INNS, as defined by the UK INNS list, developed by JNCC as a UK Biodiversity Indicator) has been analysed. The overall trend since 2000 is for increasing numbers of invasive non-native species to be recorded in the South of Scotland, from 66 species in 2000-04 to 88 species in 2020-24. This is in line with national trends.

The data needs to be interpreted carefully but identifies several species where the increasing number of records may indicate a genuine increasing trend, such as Canada Goose and American Skunk-cabbage. Other INNS, such as Ring-necked Parakeet and Harlequin Ladybird appear to have become recently established in the South of Scotland. Their impact on the environment or economy is currently unknown but their spread should be monitored.

Some INNS have been subject to control or eradication programmes. The data suggests varying levels of success. Ruddy Duck,

never common in the South of Scotland but subject to a UK eradication programme, has no recent records.

Control programmes for riparian plants such as Japanese Knotweed and Giant Hogweed appear to have had some success. The continued increase in records of Grey Squirrel suggests control measures have not succeeded in preventing a population increase of this species but may have slowed its spread. Conversely, some non-native species considered invasive by many land managers, are not classed as such for the purpose of control or eradication programmes. This includes commercial conifer species, which can self-seed widely, impacting other habitats.

There are numerous pathways by which new invasive non-native species can arrive and spread. Those currently prioritised by the GB Non-native Species Secretariat are hull fouling, horticulture escapes, contaminants of ornamental plants, ballast water, stowaways on fishing equipment and zoo or botanic garden escapes. There are suspected examples from all these pathways in the South of Scotland.

Bryophyte Indicators



Records of selected bryophytes (mosses and liverworts) from the South of Scotland were analysed as indicators of changing summer temperatures and levels of nitrogen. This assessment forms part of one of Scotland's Ecosystem Health Indicators.

The bryophyte summer temperatures indicator provides evidence that bryophytes of warmer climates are becoming more common, which could reflect land use change but more likely reflect the increasing summer temperatures observed in Scotland in recent decades. The trends for the Solway and Tweed River Basin Catchments (which equates to Dumfries & Galloway and Scottish Borders) were similar to those in most of the rest of Scotland, indicating that warming is having an impact on bryophyte communities in the South of Scotland.

The bryophyte nitrogen indicator provides evidence on whether habitats are becoming

more fertile/productive because of increased nitrogen levels. The trend for Scotland suggests that the impacts of nitrogen pollution on habitats has been declining since the late 1990s. This trend is mirrored in the trend for the Tweed River Basin Catchment, but the trend for the Solway River Basin Catchment continues to show an increase in nitrogen pollution.

Increased nitrogen levels could result from increased fertiliser use, but as most bryophytes are recorded in semi-natural habitats then changes largely reflect changes in atmospheric nitrogen pollution. The causes of increasing summer temperatures in recent decades are numerous and have been widely discussed.

An increase in summer temperatures and higher levels of nitrogen pollution is likely to have a negative impact on other species, particularly other bryophytes and lichens, that are found in the affected habitats.

Seagrass Beds



The term seagrass generally refers to members of the genus *Zostera*, the only genus of marine flowering plants in the UK. Seagrass beds are important habitats, providing shelter for a variety of marine life as well as having a role in carbon storage and coastal protection. They are of national and international importance, protected as a Priority Marine Feature through Scotland's National Marine Plan and as an OSPAR Threatened and Declining Habitat. In the South of Scotland seagrass beds are restricted to the Solway Firth and Loch Ryan.

Seagrass beds naturally go through periods of growth and retraction but significant declines in the extent of Scotland's seagrass beds were noted during the 20th century, which were attributed to poor water quality, a seagrass wasting disease, and coastal development.

In the South of Scotland, it appears that seagrass beds in the Solway Firth were unaffected by the wasting disease epidemic of the 1930s, but during the late 1980s, concern was expressed of the impact of unregulated

mechanical cockle harvesting, with reports that intertidal *Z. marina* had been virtually eliminated from areas where dredging had occurred.

A study by Carstairs & Carstairs (2026) examined the status of seagrass populations in Scottish waters, with a particular focus on reviewing evidence of seagrass declines, recoveries, and their potential causes. In contrast to most of the rest of Scotland where substantial declines were noted, significant recoveries of intertidal seagrass populations were recorded in the Solway Firth (increased by 68% in area), and in Loch Ryan (increased by 656% in area).

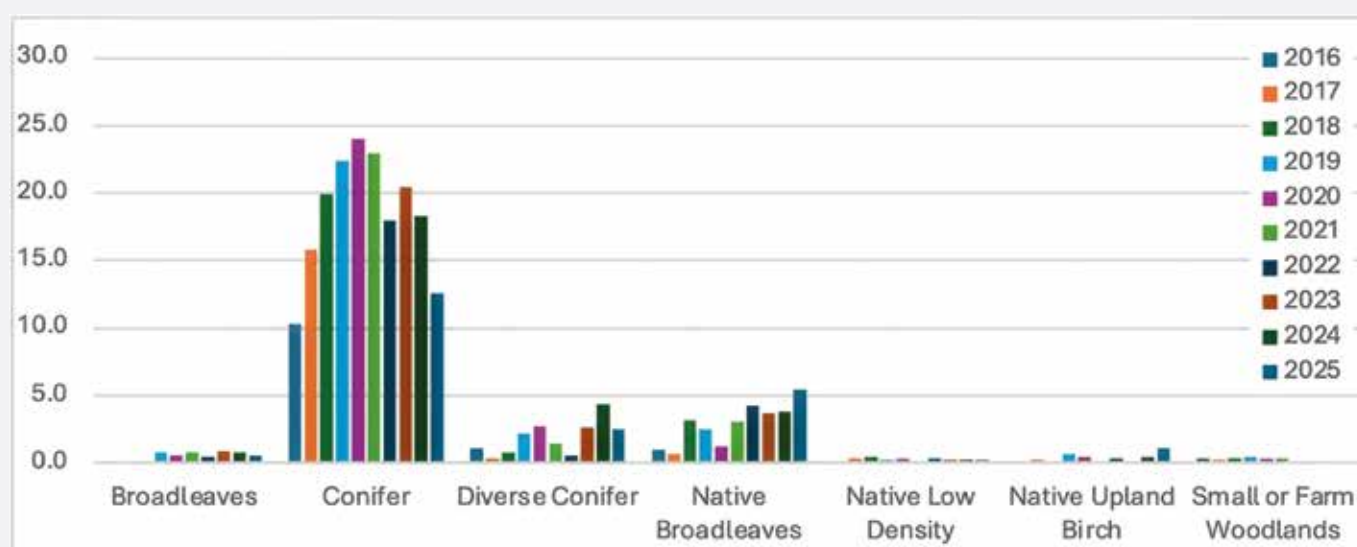
The recovery of seagrass beds in the South of Scotland has been attributed to the cessation of mechanical cockle harvesting in the early 1990s, improvements to water quality, and in Loch Ryan, the relocation of waste water discharges out of the loch and relocation of the ferry terminal away from the head of the loch between 2011 and 2013.

Forest and Woodland Expansion



Forest and woodland creation can have both positive and negative impacts on biodiversity. Much depends on the habitats and species replaced by the forest and woodland, and the type of forest and woodland created. Data on the former is not available in the published statistics for the South of Scotland. New planting of both conifers and broadleaves can support important biodiversity and help sequester carbon. Much depends on tree species diversity and structural

complexity which both tend to be greatest in native broadleaves. However, these consisted of only around 15% of all woodland types created in the South of Scotland 2016-2025. Conifers consisted of more than 80% of all woodland types.¹ Forest and woodland expansion is driven by national policy and financial incentives, some of which may have resulted in local impacts on biodiversity.



Forest Grant Scheme Woodland Creation Approvals 2016-2025 in the South Scotland conservancy by area (sq. km), year and woodland type.

Condition of Designated Sites



Several sites in the South of Scotland are designated under legislation in order to protect features that best represent our natural heritage, flora, fauna, geology, geomorphology or a mix of these features.

Designated features on Sites of Special Scientific Interest (SSSIs) are assessed by NatureScot as part of a rolling programme called Site Condition Monitoring. The purpose of Site Condition Monitoring is to determine the condition of the natural features within each site to assess whether it is likely to maintain itself in the medium to longer term under the current conditions. Each individual feature's condition is then assigned to one of eight condition categories.

There are many drivers affecting the condition of designated sites, both natural and man-made. At a national level invasive species

is the most frequent pressure (21.3% of all pressures identified), followed by over-grazing (17.8%), water management (8.5%), recreation/disturbance (8.1%), under-grazing (5.9%), agricultural operations (4.0%), natural events (3.7%), trampling (3.5%), burning (3.3%), forestry operations (2.9%), game / fisheries management (2.7%), lack of protective management (2.3%), water quality (2.2%), dumping/storing of materials (1.8%) and climate change (1.6%).

In Scotland as a whole the proportion of features in favourable condition was assessed as 75.2% in 2025. The proportion of features in favourable condition in the South of Scotland was assessed at 70% in 2025 with features in the Scottish Borders in slightly better condition (72%) than those in Dumfries & Galloway (68%).

Summary

The overall trend in biodiversity in the South of Scotland over the last 25 years, based on the best available data, is one of decline. However, this is not a trend that can be universally applied to all ecosystems, habitats, species or locations – there is a significant degree of variability. In order to assess future trends, it is important that existing monitoring is supported and, where possible, expanded to cover a wider range of biodiversity, especially where significant gaps exist.

Potential Indicators

Further work is required to develop a suite of biodiversity indicators for the South of Scotland. Potential indicators, currently supported by adequate data collection, are listed below, but some of the data analysed for State of Nature has been collected from one-off or infrequent surveys and will not be available for use as an annual or even a five-yearly indicator.

- Abundance of breeding seabirds
- Abundance of wintering wetland birds
- Distribution of threatened breeding birds
- Distribution of threatened mammals
- Distribution of threatened larger moths
- Number of species 'lost' and 'gained'.
- Number of invasive non-native species
- Bryophyte indicators of summer temperatures and nitrogen
- Extent of seagrass beds
- Extent and type of woodland creation
- Condition of natural features on designated sites

Additional Potential Indicators

These potential indicators were not used in this report but may be possible to include in future updates:

- Extent of peatland subject to restoration
- Extent of plantations on ancient woodland sites undergoing restoration
- Water quality assessments for freshwaters
- Abundance and diversity of fish stocks

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southern uplands partnership
living land, living community

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