



State of Nature 2024 Summary Report

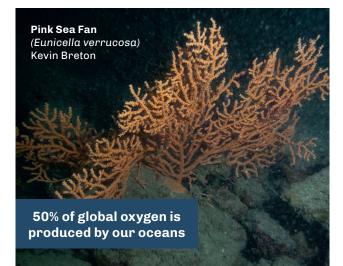


Introduction

State of Nature 2024 has been produced to provide information on the state of habitats and species on the islands of Guernsey, Lihou, Herm, Jethou and The Humps. It provides, where data is available, a benchmark for the status of our natural environment which can be used as a comparison in later years and help guide conservation efforts.

It also highlights pressures on our species and habitats so that we can better understand what is driving changes. Additionally, further areas for research are identified. The intention will be to update the State of Nature every five years, providing the opportunity to fill gaps in our knowledge and highlight new areas of research.

The State of Nature 2024 report is considered to be the first-ever comprehensive assessment of Guernsey and Herm's natural environment. The information provided in this document summarises the key information provided in the main report. The full State of Nature 2024 report can be accessed on the Nature Commission website.



Why Nature Matters

Why do we need to monitor the state of nature? Why is it important to look after our wildlife, habitats, and the connections between them?

The natural environment provides us with ecosystem services, such as local milk from Guernsey cows, protection from extreme weather events, our outdoors areas such as beaches and nature reserves to experience, and productive soils for growing crops. We rely on these services to live and enjoy our lives.

Humans have modified ecosystems to increase the economic value of some of these ecosystem services, such as food production. These modifications cause disruptions to the delicate balances in ecosystems, affecting the natural environment's ability to provide other services, including the ability to regulate the climate. Over three-quarters of land on Earth has been altered by humans. The Earth is currently in the midst of a 6th mass extinction at an unprecedented rate – caused by people. Being on an island does not shield us from that crisis, with Guernsey and Herm more vulnerable due to small populations of species.

We are discovering the direct benefits of a healthy natural environment; being connected with nature boosts our mental health and well-being. However, a 2018 UK study found that children spent only 4 hours outside per week which is 50% less than their parents did when they were young. Most children struggle to identify common plant and animal species, which affects their appreciation of the natural environment. By teaching our communities to recognise nature and its right to exist alongside and in harmony with humans, we will ensure the survival of our natural environment, and therefore us, into the future.

Basking Shark (Cetorhinus maximus) Sue Daly

Drivers of Change

It is important to understand the causes and rate of change in the natural environment. This enables us to understand how we can manage and mitigate the negative impacts and promote the positive impacts of those changes. Various factors will drive change directly and indirectly and can be generated naturally or by human activities. By increasing our understanding of drivers of change, alongside improved understanding of our species and habitats, we can introduce additional, targeted conservation measures to try and address the imbalance brought about by negative anthropogenic (human) impacts. The primary threats, or pressures, to our natural environment in Guernsey and Herm are outlined below.



Land Management

Agricultural Land

It is widely acknowledged in the UK that the post-war demand for self-sufficient food production has reduced the amount of biodiverse, natural habitats. This is due to the intensification of farming methods and the loss of ecologically important farmland habitat such as hedgerows and permanent grassland to arable monocultures. The same has happened in Guernsey, although on a smaller scale, causing large amounts of land to become less suitable for wildlife. Intensive land management as well as lack of management have driven habitat change and species decline.

Improved grassland is the dominant habitat type in Guernsey, accounting for 21% of the total area. It has been 'improved' through applications of fertilisers and pesticides, frequent cutting or grazing and sometimes ploughing and reseeding. As such, it is poor habitat for wildlife, and has replaced several areas of species-rich grassland. These 'improved' areas can be species-poor for several decades, even when they are no longer receiving agricultural inputs.

The increase in these 'improved' habitats has caused declines in many of our species. Many birds rely on seeds produced by cover crops and wildflowers, or permanent grasslands cut late for hay for nesting, which are no longer present in many farming systems. Several species of farmland birds are now extinct as breeders in Guernsey, such as the Yellowhammer and Corn Bunting. Other species such as Linnet and Skylarks, have declined considerably.

In Guernsey, unimproved and semi-improved marshy grassland, which are very biodiverse, have declined by 37% since 1999

Domestic Land

The conversion of agricultural land to domestic curtilage has amplified the need for intensive land management. Gardens on former agricultural land which has been extended to domestic curtilage, have increased in total area in Guernsey by 39% since 2010. These areas, termed amenity grasslands, are heavily managed with lawns closely mown or having been reseeded, often with little biodiversity present. Other areas that are usually heavily mown include parklands and these habitats are typically species-poor. The area of parkland has increased in Guernsey by 155% overall since 1999 and amenity grassland has increased by 33% since 1999. This often replaces habitat of high ecological value with very low biodiversity alternatives.

Domestic gardens and parks have considerable potential as habitat for wildlife if they are managed sympathetically. Gardens could provide shelter and food for many species displaced as a result of scrub encroachment, conversion to improved grassland, and inappropriate management. Similarly, our hedge banks are excellent wildlife corridors between habitats. They could help to create a network between our natural and sympathetically managed parks and gardens, improving connectivity between habitats.

Lack of Management

Conversely, lack of management can also be detrimental to biodiversity. Land abandonment can lead to an increase in scrub and woodland. Scrub encroachment and lack of grazing can result in degradation of habitat quality and reduction in biodiversity.

While scrub is also a valuable habitat, providing food and nesting sites, it is less biodiverse compared to our species-rich grasslands. A balance is needed to implement good land management practices, particularly in areas of high conservation value like Priority Habitats, Sites of Special Significance (SSS) and Areas of Biodiversity Importance (ABI).

Development and Land Use Change

Being an island means that lack of land availability creates a tension between development and providing space for nature. There is a potential for further declines in valuable habitat if development on our green spaces and our coastal zone in Guernsey and Herm continues without thorough consideration of the biodiversity impacts.

Development can lead to:

- Habitat fragmentation
- Direct loss and degradation of valuable habitat
- Loss of breeding and nesting sites
- Un-wildlife friendly gardens
- Unnecessary illumination of buildings
- Coastal squeeze
- Disturbance

Invasive Non-native Species

Invasive non-native species are plants or animals which have been introduced to an area by humans in which they are then able to thrive, to the detriment of local species, the economy or public health. Invasives are a considerable threat to biodiversity and can cause major problems on islands.



Impacts of invasive species include:

- Competition
- Predation
- Disease
- Hybridisation
- Habitat alteration/degradation
- Upsetting the natural balance

Pollution

Pollution is classed as the introduction of harmful materials (pollutants) into the environment. Some pollutants may be classed as natural, such as volcanic ash. However, the majority of pollutants in Guernsey and Herm come from anthropogenic sources. Pollution is a worldwide pressure, with chemicals used thousands of kilometres away being found in the blood of animals native to the Arctic and Antarctica.

Chemical and Nutrient Pollution

In Guernsey and Herm, chemical and nutrient pollution consists mainly of fertiliser and pesticide run-off, antifoul, bleach, detergents, and sewage. This pollution negatively affects our soils and aquatic environments.

Impacts of chemical and nutrient pollution:

- Contamination
- Ocean acidification
- Toxic chemicals
- Algal blooms

Overall pesticide levels in Guernsey increased 65% between 2019 and 2021

Physical Pollution

Physical pollution mainly consists of material discarded by humans, whether intentionally or accidentally. Plastics in particular are having a major impact on wildlife, due to their ability to persist in the environment for many decades. Around 300 million tonnes of plastic are produced every year globally, of which 80% has ended up in the environment, including in landfills.



Effects of plastic pollution on wildlife:

- Entanglement and ingestion
- Habitat degradation
- Chemical bioaccumulation

50% of marine litter in Guernsey comes from the public

Light Pollution

Light pollution has become increasingly detrimental to nocturnal wildlife in recent years. This is directly caused by humans, through the use of street lights, security lighting on buildings, and lamps used to illuminate buildings such as houses and churches. Even leaving your curtains open after dark with lights on inside creates light pollution. While some of these lights are necessary, the theme of lighting up landmarks and homes at night is detrimental to our wildlife.

Impacts of light pollution

- Disruption of natural behaviours
- Disruption of natural rhythms
- Physical barriers

Sound Pollution

Underwater noise can have a significant impact on the behaviour of species or, in the case of sensitive species such as cetaceans, can result in permanent injury or death. Underwater noise is created by human activities in the marine environment, such as piling, sonar surveys, boating or jet skiing. Use of drones can also impact marine wildlife.

Impacts of sound pollution:

- Disruption of natural behaviours
- Stranding
- Stress

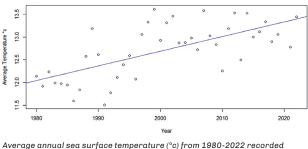
Climate Change

Climate change is one of the most significant threats to biodiversity globally. The evidence suggests that it is having an impact now. However, the impacts are likely to increase significantly over time, increasing the level of threat that our wildlife will face in the future. Some species will be able to adapt, while others will not and are therefore likely to decline without human intervention.

Climate change pressures include:

- Increasing air and sea temperatures
- Sea level rise
- Increased extreme weather events
- Ocean acidification

- Increased spread of invasive species
- Changes in season



within Guernsey's terrestrial waters (Sea Fisheries, 2024; Coule, 2024).

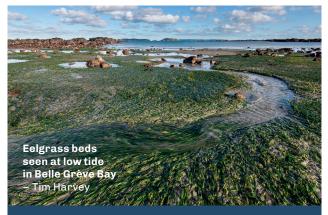
5.6% of Guernsey's surviving species have been assessed as globally threatened with extinction

Commercial/Recreational Fishing and Harvesting

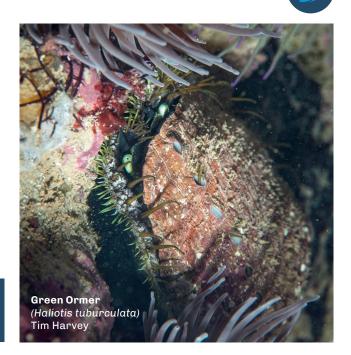
There is no robust data currently available on the populations of fish and other commercial species in our seas, or of the wider impacts of fishing on the marine environment. Therefore, it is unknown if commercial and recreational fishing activities are having a detrimental effect. However, data suggests that >9% of marine litter found in Guernsey has come from fishing activities, which may be an indication that there is an impact.

Shore gathering includes seaweed harvesting, bait digging and foraging for Ormers. Intensive harvesting may reduce the biodiversity of the marine intertidal zone and have further effects on the species that utilise those areas This is through population decline from direct harvesting and indirect impacts of disturbance caused by extraction methods (e.g., digging in Eelgrass beds, trampling and rock turning).

While collecting Ormers is regulated, there is no mitigation for damage caused during the activity such as the turning over of rocks and boulders, which impacts this species' food source. As there is no data on the health of our Ormer populations, it is difficult to evidence if our stocks have been or are being harvested sustainably.



Only 1% of marine habitats in Guernsey as are designated as protected areas



Gaps in Knowledge and Understanding

While all the drivers of change discussed here are certainly having an impact, they are predominantly anthropogenic. This means they are caused by human activities and could theoretically be reversed by changes in our activities. A lack of awareness amongst individuals and organisations about the importance of biodiversity are pressures that hinder attempts to conserve our natural environment.

People are less likely to participate or invest in conservation if they don't understand why it is so important. There is a general lack of engagement with nature in communities, especially in young children, which is also being seen in Guernsey. An increase in our engagement with nature develops an increased empathy with the natural environment leading to changes in behaviours that reduce negative, anthropogenic impacts. Encouraging a passion for the natural environment in the younger generation will help to address the lack of knowledge and increase understanding of the importance of the natural environment.

In Guernsey and Herm, there is a considerable lack of biological data available to inform actions and decision making; birds appear to be the only group with sufficient long-term data to enable us to determine which species are declining and which are improving. However, we still do not have sufficient data to help us understand the reason for changes in bird populations over time, which prevents us from understanding how we can best help. Lack of species population trends are a concern. We cannot make the best use of our resources by targeting efforts if we do not know what aspects of the natural environment most urgently need our help and how.

We do not have enough data to be able to risk assess our habitats and species to determine which should be prioritised for support. Citizen science data contributes to the provision of much needed data about our natural environment. This will help identify appropriate conservation measures and provide individuals and communities with the real sense that they can make a difference.

More information about the drivers of change and how they are impacting Guernsey and Herm is available in the full State of Nature 2024 report.

What can we do to help?

Use your Love of Nature to Influence

Influencing those around you, including your friends, family, and decision-makers at business and government level is a great way to help ensure your love of nature is considered.

Letting your Parish or Government representatives know that you would like to see better outcomes for the natural environment is a tool available to us all.

Record your Biological Sightings

An important way that we can help protect the natural environment is by recording sightings on iRecord. iRecord is a free app which enables the submission of wildlife sightings from multiple sources, particularly the public¹.

Submission of sightings can include native or invasive nonnative species with the location, date and number seen. This is important in helping to understand abundance and distribution across Guernsey and Herm, and to help inform conservation measures.

Volunteer

There are lots of citizen science surveys being run locally in which individuals can take part. Additionally, there are organisations, many of which lead citizen science





Species-rich hedgerows have declined in length by 52% since 1999 in Guernsey

surveys, which you can volunteer with and contribute to, to support the amazing work they do protecting our natural environment. It is important to feed into these national surveys, to help build a picture of the state of nature in Guernsey and Herm and more widely in the British Isles. Contact the Guernsey Nature Commission to find out more about how to get involved.

Garden for Nature

1/3rd of terrestrial habitats in Guernsey are domestic gardens. If everyone gardened for wildlife, this would provide a major boost to many species, especially pollinators. There are many ways to help wildlife in your garden and associated areas, including:

- Trim hedges infrequently, as little as every three years. Avoid cutting hedges during bird breeding season which is usually between March and August.
- Consider alternatives to pesticides, such as using organic gardening methods.
- Where lighting is needed, use wildlife-friendly outdoor lighting .
- Create woodpiles, compost heaps and leave rotting logs in the garden as homes for nature.
- Grow a diverse range of native wildlife-friendly plants throughout the year.





Only 14% of terrestrial and freshwater habitats in the Bailiwick of Guernsey are designated as protected areas

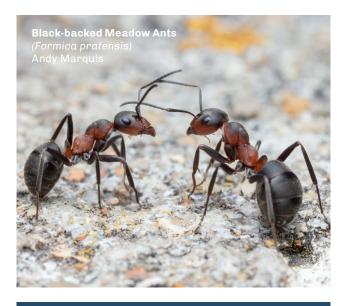
- Leave dead plant matter and hollow stems for overwintering larvae.
- Take part in 'No Mow May', 'Let it Bloom June' and 'Knee-high July'.
- Leave fallen fruit for insects and birds to feed on. •
- Put up bird feeders, nestboxes and provide water. •
- Know what you grow don't plant invasive non-native species and dispose of garden waste responsibly so that invasive plants are not released into the wild.

It is recommended that you understand what you have in your garden before making any changes. Your garden may be perfect for wildlife just as it is!

Consider the Impact of your Activities in the Environment

- Always follow the Wildlife Code of Conduct³ and the • Strictly for the Birds Code of Conduct².
- Call the GSPCA if you find sick or injured wildlife.
- Always recycle plastics and dispose of litter and dog waste responsibly.
- When collecting Ormers and rock pooling, ensure rocks are replaced to their original location and orientation.
- Always stick to footpaths where possible.
- Follow the dog-friendly beaches rules in summer and • prevent pets from frightening /harassing wildlife by keeping them on a lead.

There has been a 20% increase in the number of human-made habitats in Guernsey since 1999



The population of Black-backed Meadow Ant, which is only found in Guernsey and Jersey within the British Isles and is classified as Near Threatened, has decreased 42% in Guernsey since the 1990s.







Small-flowered Catchfly (Silene gallica) Anne Woodington





² Wildlife Code of Conduct – States of Guernsey (gov.gg)

¹ About iRecord | iRecord

Conclusion

One of the key themes throughout State of Nature 2024 is the lack of data.

State of Nature 2024 demonstrates that we generally know which species and habitats are present in Guernsey and Herm, particularly on land. Considerably less certainty is available regarding our marine habitats and species. Without robust data, it can be difficult to know the state of our habitats and species; where conservation efforts should focus; and what can be done to help.

For the habitats and species that we do have trends for, declines have been identified.

- Our wading birds and seabirds have declined overall, and this is significant as Guernsey and Herm support important national and international populations of these groups.
- We have lost many breeding species of terrestrial and marine birds, several of which are also declining worldwide such as the Turtle Dove.
- Our terrestrial natural habitats have decreased overall since 1990, including many of our most biodiverse and species-rich habitats. Unimproved grassland, has become locally extinct, impacting local plants and species higher up the food chain.
- Given that the species we do have trends for have suffered declines, it is a possibility that species we do not have trends for may be declining without any evidence to demonstrate this. It may also be likely that some of these species are at risk of local extinction and may be lost from the island if nothing is done.

More data must be obtained if we are to understand which habitats and species need the most support. Stronger protection can then be introduced to slow and halt declines and make space for nature.

Although more information is needed about how existing pressures affect our habitats and species, it is important that we reduce these pressures on our environment as much and as soon as possible, as they will cumulatively impact our habitats and species. Conservation measures cannot be effective if there is no change in the pressures causing declines and losses.

> Coastal grassland in Guernsey has decreased by 16% since 1999

Shingle habitat in Herm and Jethou has decreased by 53% between 2010 and 2018



As an island we have an opportunity to lead the way on a small-scale and demonstrate that we can be world leaders in working together to protect and restore wildlife. Everybody has an important contribution to make for the protection and enhancement of our natural environment.

Without the combined efforts of all, it is likely that we will continue to see biodiversity loss and further realise the effects of this on our economy and our health and well-being.

The invasive Sour Fig has increased in area by 123% since 2010

Parkland in Guernsey, which is typically species poor, has increased 155% since 1999

The full State of Nature 2024 report can be accessed on the Nature Commission website.



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