



Office for  
**Environmental  
Protection**

**Drivers and Pressures Affecting Biodiversity in  
Northern Ireland**  
*November 2024*

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# What is the OEP?



- Public body, established by the Environment Act 2021
- Remit covers **Northern Ireland, England** and **UK reserved matters**
- Located in Worcester and Belfast
- ~80 staff: scientists, lawyers, regulators, professional services
- Extended to NI in February 2022
- 14 staff in NI; and local Board Member
- **'One OEP'** – an integrated organisation across 2 jurisdictions



# The OEP functions



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We protect and improve the environment by holding government and other public authorities to account



# Work in Northern Ireland



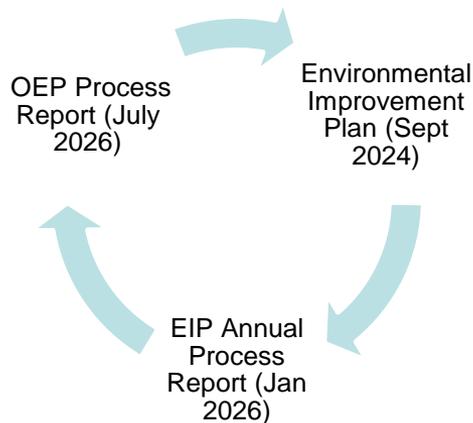
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**Scrutinising Environmental Improvement Plans (EIPs) and targets**

We review and report on progress in delivering environmental improvement plans, goals, and targets.

## Publication of the EIP



Government must respond to the OEP assessment



**Scrutinising environmental law**

We monitor and report on the implementation of environmental law.

- Water Framework Directive Report (Sept 24')
- Bathing Waters Regulations report (Nov 24')
- Protected Sites report (Feb 25')

# Work in Northern Ireland



## Advice

We advise government on proposed changes to environmental law and other matters related to the natural environment.

- Assessment of Environment Strategy's
- Environmental Principles Policy Statement
- Draft Ammonia Strategy
- Draft Circular Economy Strategy



## Enforcement

We investigate suspected serious failures to comply with environmental law by public authorities and enforce compliance where needed.

- Operational Protocol (Ammonia)
- Special Protection Areas network review
- Publication of the EIP
- Interventions

# Operational Protocol Ammonia



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## Overview

- Standing advice that DAERA provided to planning authorities to assess the impacts of ammonia emissions on protected sites.
- >99% Of SACs and SPA, ASSIs, are exposed to ammonia concentrations exceeding  $1\mu\text{g m}^{-3}$
- Until December 2023, DAERA's standing advice, apply thresholds (1%) which were not scientifically robust and risked screening out plans/projects which were likely have a significant effect on protected sites.
- The OEP concluded that this represented a failure to comply with environmental law



# Operational Protocol Ammonia



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## Overview

- OEP received several complaints Mar '21- Jun '22
- Investigation launched – May '23
- DAERA paused the issuing of ammonia planning advice – May '23
- DAERA resumed the issue of advice- Sept '23
- Judicial review pre-action correspondence sent to DAERA- November '23
- DAERA replaced the Operational Protocol with a legally compliant Interim Framework – Dec '23



# Developing an evidence base to inform our actions



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## Advice

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## Enforcement

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## Report Drivers and pressures affecting terrestrial and freshwater biodiversity in Northern Ireland

**Aim:** to provide an objective evidenced-based assessment of the impact of drivers and pressures on biodiversity in Northern Ireland

# Key messages

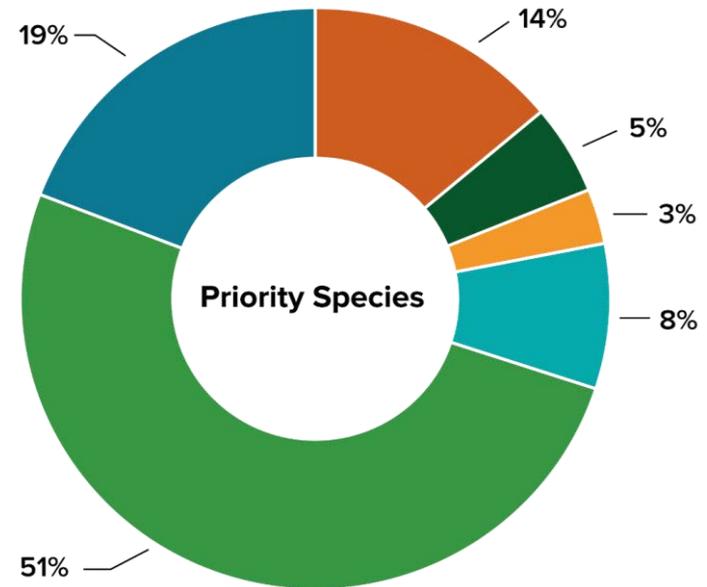
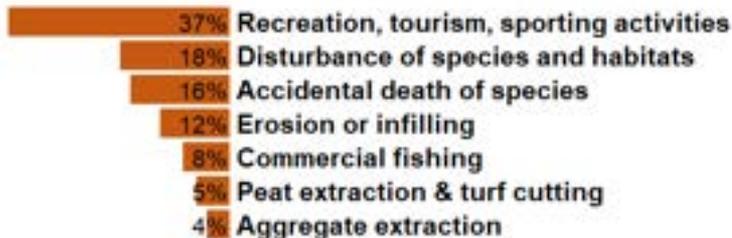
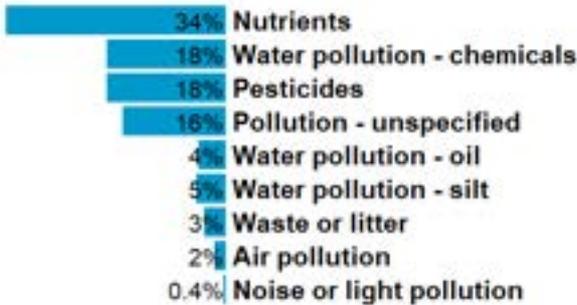
-  The pressure on NI nature is unsustainable
-  Agri-food industry is unsustainable in its current form
-  Responsibility does not rest solely with the agri-food industry
-  Society's use of natural resources, consumption & waste are unsustainable
-  Concerning gaps in evidence related to chemicals, climate change, development & cumulative impacts.
-  Prompt and decisive action is essential

Drivers and pressures affecting terrestrial and freshwater biodiversity in Northern Ireland

# Priority species



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Land use change



Pollution



Natural resource use



Climate change



Invasive species

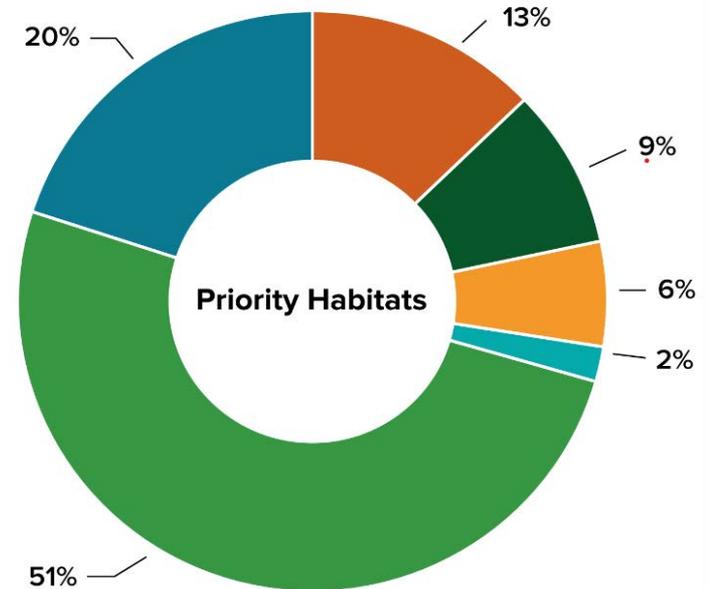
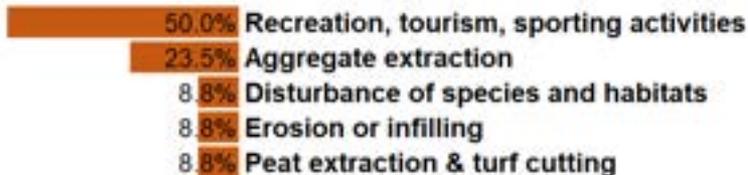
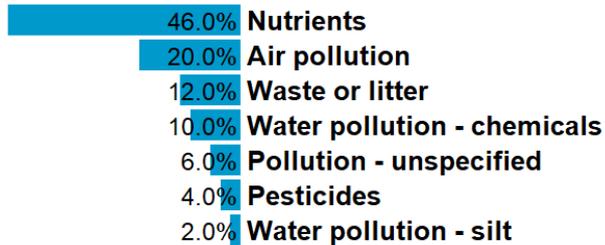
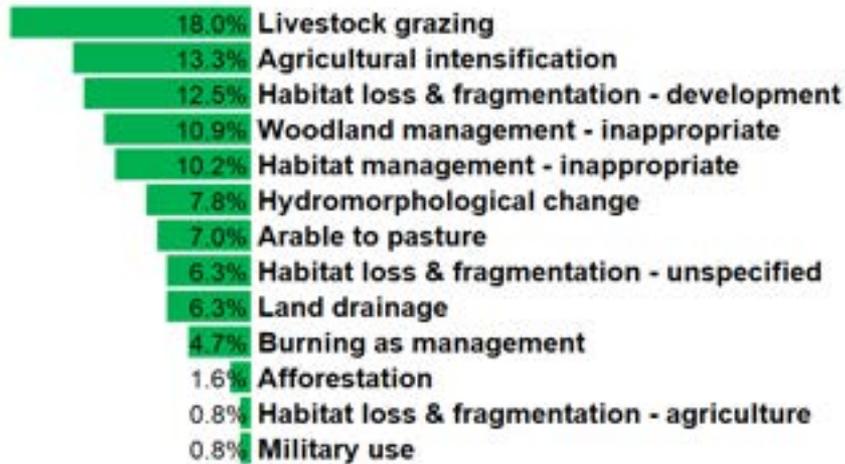


Other pressure/not specified

# Priority habitats



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Land use change



Pollution



Natural resource use



Climate change



Invasive species



Other pressure/not specified

# Land use change



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Land use change	
Confidence	Key findings
High	Land use change, and the resulting habitat loss and fragmentation, is the biggest cause of the decline in biodiversity in NI.
High	The majority of land use change in recent decades is attributable to the expansion and intensification of agriculture in NI.
Medium	Urban and rural development has resulted in habitat loss and fragmentation.
High	Hydrological modifications to rivers and their catchments, to support land use intensification and development, has caused significant loss and fragmentation of terrestrial and freshwater habitats.
High	The overall rate of habitat loss and fragmentation due to land use change appears to have slowed, but historical changes continue to impact biodiversity.

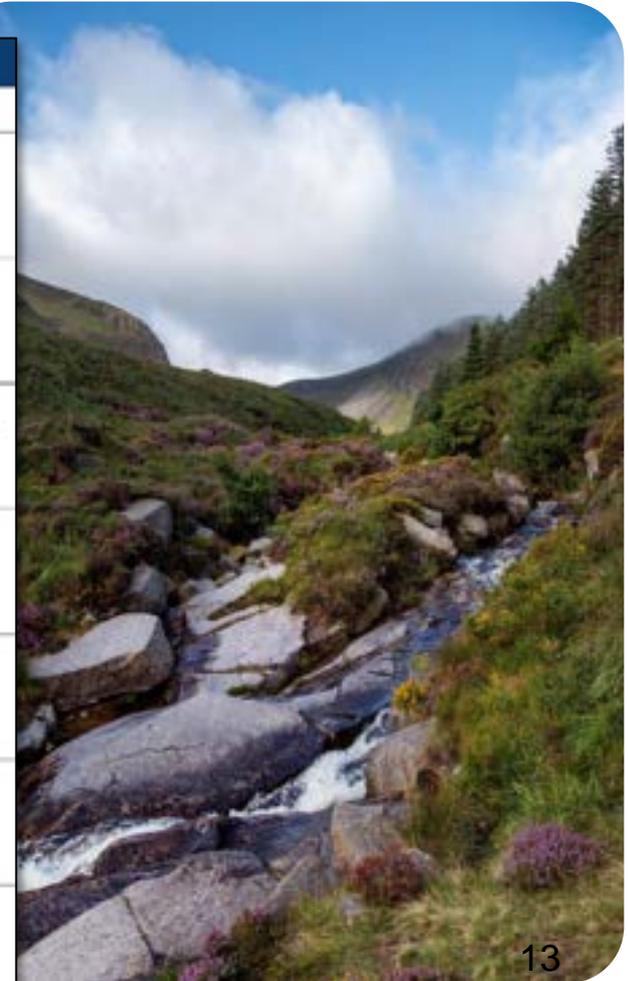


# Pollution



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Pollution	
Confidence	Key findings
High	Impacts of nutrient pollution are widespread and pervasive across freshwater and terrestrial ecosystems in NI.
High	Agriculture is the dominant source of nutrient pollution in NI.
High	Wastewater is making a significant contribution to nutrient pollution in waterways.
High	While historical practices have contributed significantly to the impacts of nutrients on biodiversity, current inputs into the environment are environmentally unsustainable.
High	Chemical pollution is a threat to biodiversity. However, the extent of chemical impacts on terrestrial and freshwater biodiversity in NI remains largely unknown.
Medium	Light and noise pollution from rural and urban development have impacts on biodiversity but the extent of this impact in NI is unknown.
Medium	Limitations to the monitoring and reporting framework for waste mean the pressure of waste and litter on biodiversity is likely underestimated.



# Resource use



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Natural resource use and exploitation	
Confidence	Key findings
High	A range of natural resource use and exploitation pressures are affecting biodiversity in NI.
High	Recreational activities, including related development and infrastructure, are a growing pressure affecting biodiversity. Coastal habitats are particularly impacted by these activities.
High	NI has an unsustainable material and ecological footprint due to above average resource consumption and extraction rates.
High	Aggregate extraction is negatively affecting biodiversity in NI.
High	The evidence base concerning the impact of natural resource use and exploitation activities on biodiversity should be scaled up, including cumulative impacts.



# Climate change



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Climate change	
Confidence	Key findings
High	There is robust evidence on causes of climate change, including sectoral responsibility for emissions of greenhouse gas emission in NI.
High	Impacts of climate change on biodiversity at the global scale are well established.
Medium	Climate change is affecting biodiversity in NI.
Medium	The effects of climate change individually and interactions with other pressures create uncertainty in predicting the outcome of strategies to improve biodiversity in NI.
High	There is a pressing need for a more systematic assessment of the effect of climate change including under future emission scenarios on biodiversity
High	Nature-based solutions will be vital for improving biodiversity and mitigating and adapting to climate change.

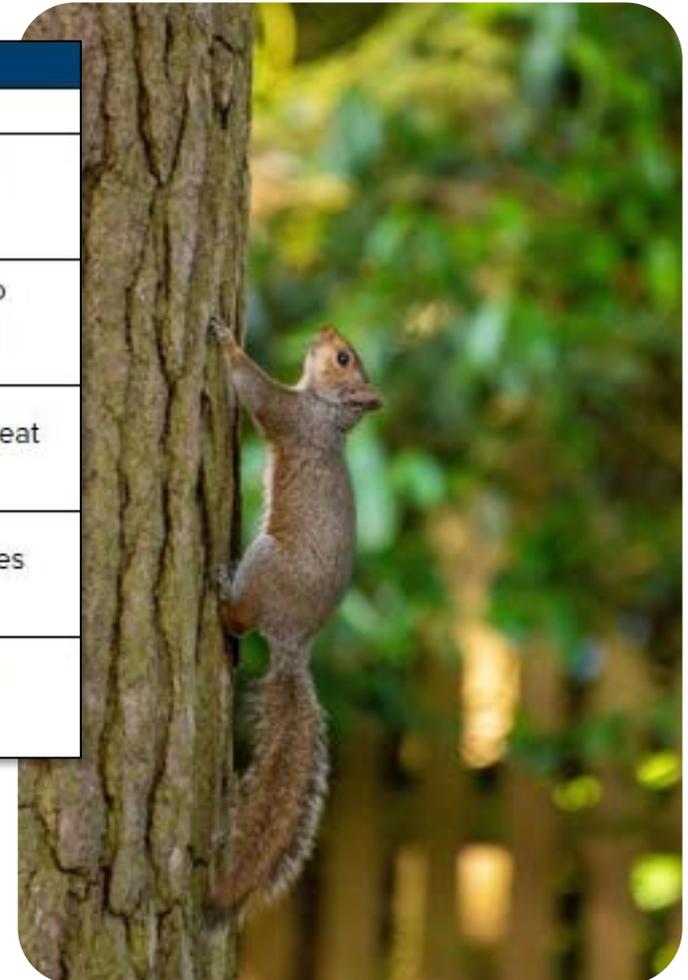


# Invasive species



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Invasive species	
Confidence	Key findings
High	A range of invasive species are affecting biodiversity in NI and across the island of Ireland.
High	The impacts of invasive species and pathogens are expected to worsen under predicted climate change and due to increasing global trade and travel.
High	Pathogens are affecting biodiversity in NI and are a growing threat due to climate change.
High	Cross border responses are required to address invasive species and pathogens
High	The prevention of, and rapid response to, invasive species and pathogens are essential to effectively protect terrestrial and freshwater biodiversity.

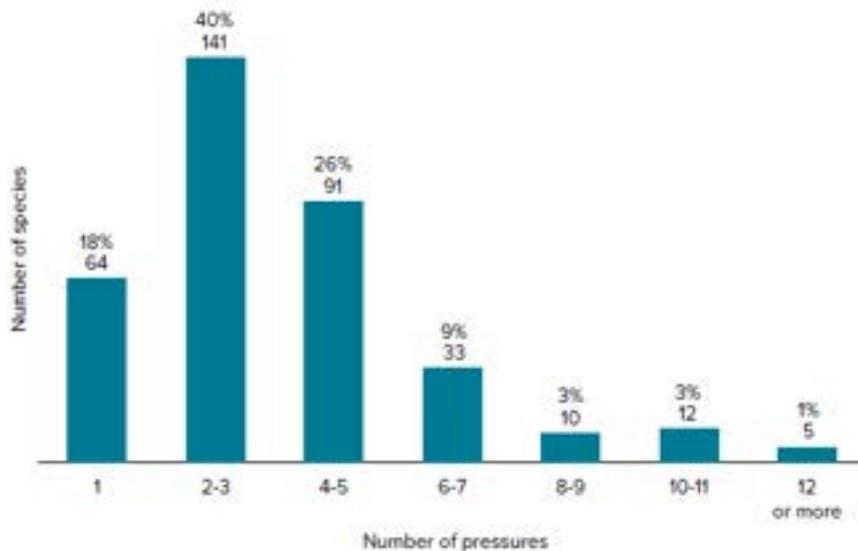


# Multiple Pressures

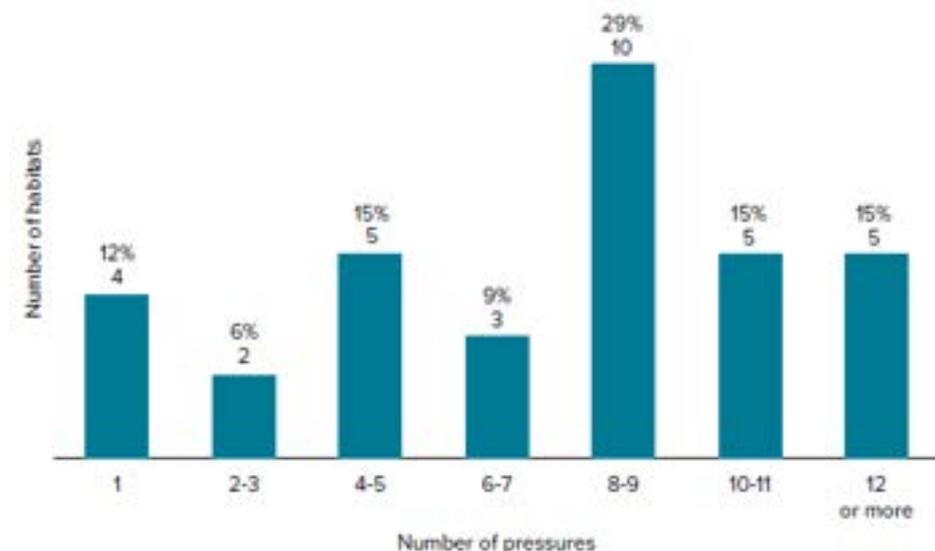


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## Priority Species



## Priority Habitats



# Recommendations



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**R**educe pollution by nutrients from farming and sewage.



**C**hange land use to restore habitats.



**R**educe the material and ecological footprint.



**A**ct urgently and effectively.



# Recommendations



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1

## Reduce pollution by nutrients from farming and sewage.

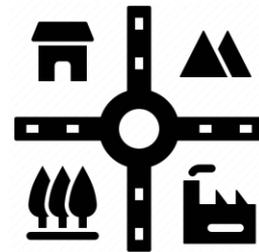
NI has an unsustainable nutrient surplus. Government should prioritise addressing nutrient pollution arising primarily from the agri-food industry, and from sewage treatment.



2

## Change land use to restore habitats.

Most seminatural habitats have been destroyed or become fragmented by land use change. A focus on restoration and nature positive land use change is essential to provide space for nature and increase biodiversity in urban and rural areas.



# Recommendations



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3

## Reduce the material and ecological footprint.

The extraction, consumption and disposal of raw materials are causing widespread damage to biodiversity within NI and beyond. Action should be taken to reduce the impact of society on the environment to achieve a sustainable footprint.



4

## Act urgently and effectively.

We recommend that the government should:

- a. Adopt an adaptive management approach
- b. Ensure there is coherence between approaches
- c. Develop detailed implementation plans and clear targets
- d. Address the knowledge gaps
- e. Develop a monitoring, evaluation and learning framework that focuses on outcome-based targets.





# Next Steps



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- ➔ Scrutiny - Environmental Improvement Plan
- ➔ Nutrient Programme
- ➔ Chemical Programme
- ➔ Agri-environmental Programme
- ➔ Protected Site Report
- ➔ Marine Programme



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