National Biodiversity Indicators

2018 STATUS & TRENDS

National Biodiversity Data Centre
Documenting Ireland's Wildlife

GBIF Global Biodiversity Information Facility

Citation:

National Biodiversity Data Centre (2019). National Biodiversity Indicators: 2018 Status and Trends. National Biodiversity Data Centre, Waterford, Ireland.

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ISSN 2565-5620 (Print) ISSN 2565-5639 (Online)

Acknowledgements:

We are grateful to the following organisations for the use of their data and contribution to the National Biodiversity Indicators: An Taisce, BEC Consultants, BirdWatch Ireland, BT Young Scientist & Technology Exhibition, Chartered Institute of Ecology and Environmental Management, Dept. Agriculture, Forestry and the Marine (Forest Service, Marine Institute), Dept. of Communications, Climate Action and Environment (Environmental Protection Agency, Inland Fisheries Ireland), Dept. Culture, Heritage and the Gaeltacht (National Parks and Wildlife Service), Dept. Foreign Affairs and Trade (Irish Aid), European Commission Directorate-General for Communication, European Environment Agency, Google Trends, the Heritage Council, the network of Heritage and Biodiversity Officers across Local Authorities, the network of recorders across the Bumblebee and Butterfly Monitoring Schemes, and the Office of the Revenue Commissioners (Investigations & Prosecutions Division).

An Chomhairle Oidhreachta
The Heritage Council

COMPASS INFORMATICS

An Roinn Cultúir, Oidhreachta agus Gaeltachta
Department of Culture, Heritage and the Gaeltacht

About the National Biodiversity Data Centre

The National Biodiversity Data Centre is a national organisation that collects and manages data on Ireland's biodiversity, to both document Irish's wildlife resource and track how it is changing over time. The Data Centre was founded in 2007 by the Heritage Council and is funded by the Heritage Council and the Department of Culture, Heritage and the Gaeltacht. One of the Strategic Objectives of the Data Centre is to facilitate and promote the use of biodiversity data to inform public policy and decision-making through data analysis, interpretation and reporting. The National Biodiversity Indicators have been developed to provide easy access to biodiversity data that can inform conservation policy and assist biodiversity reporting. Biodiversity data are a key requirement for understanding our natural surroundings, for tracking change in our environment and for gaining a greater insight to how we benefit from, and impact upon, the ecosystem goods and services provided by biological diversity; a national asset which contributes at least €2.6 billion to the Irish economy each year.

Main website: www.biodiversityireland.ie
Mapping system: maps.biodiversityireland.ie
Citizen science portal: records.biodiversityireland.ie

Further information

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1 Introduction

What is biodiversity?

Biodiversity refers to all the variety of life that can be found on Earth. Biodiversity can also refer to variability at a range of biological levels: genetic, species and ecosystem.

- Genetic diversity: the variation in genetic information within an individual, across individuals within a population, and across populations within a species.
- Species diversity: the variation in the number and abundance of species within a given area and across areas. Ireland has 31,500 species of which potentially another 8,500 have yet to be discovered.
- Ecosystem diversity: the variation in the number of ecosystem types (e.g. calcareous grasslands, fixed dunes or raised bogs) with a given area and across areas. Ireland has 117 terrestrial and freshwater habitats, and 23 seabed habitats.

What is a biodiversity indicator?

A biodiversity indicator reflects the current state, and change in state, of verifiable data that relate to biodiversity. The types of data that relate to biodiversity includes direct measures such as the number of endangered species and habitats, as well as indirect measures such as number of biodiversity-related policies implemented. This information provides an important source of evidence for reporting on biodiversity change, conservation action and informing conservation policy at national, European and global levels. Action 1.1.18 of the Dept. Culture, Heritage and the Gaeltacht's National Biodiversity Action Plan 2017-2021 identifies biodiversity indicators as key tools in tracking implementation of national policy.

Why do we need National Biodiversity Indicators?

Multiple lines of evidence from different sources can be used to evaluate the relationship between actions to protect biodiversity and observed impacts, and progress towards attaining specific biodiversity targets. In combination with expert opinion, stakeholder consultation and case studies, indicators provide quantitative measures based on verifiable data that are objective, robust and minimise the subjectivity inherent in other approaches. Indicators can be used to:

- track changes in biodiversity and understand why it is changing;
- inform decision makers on appropriate goals, policies and actions to conserve and restore biodiversity;
- raise awareness and provide a valuable resource for the public on the status, trends, pressures and conservation actions relating to biodiversity;
- both track and report on effectiveness of policy decisions and actions taken nationally, and benchmark progress towards regional and global targets.

Who produces the National Biodiversity Indicators?

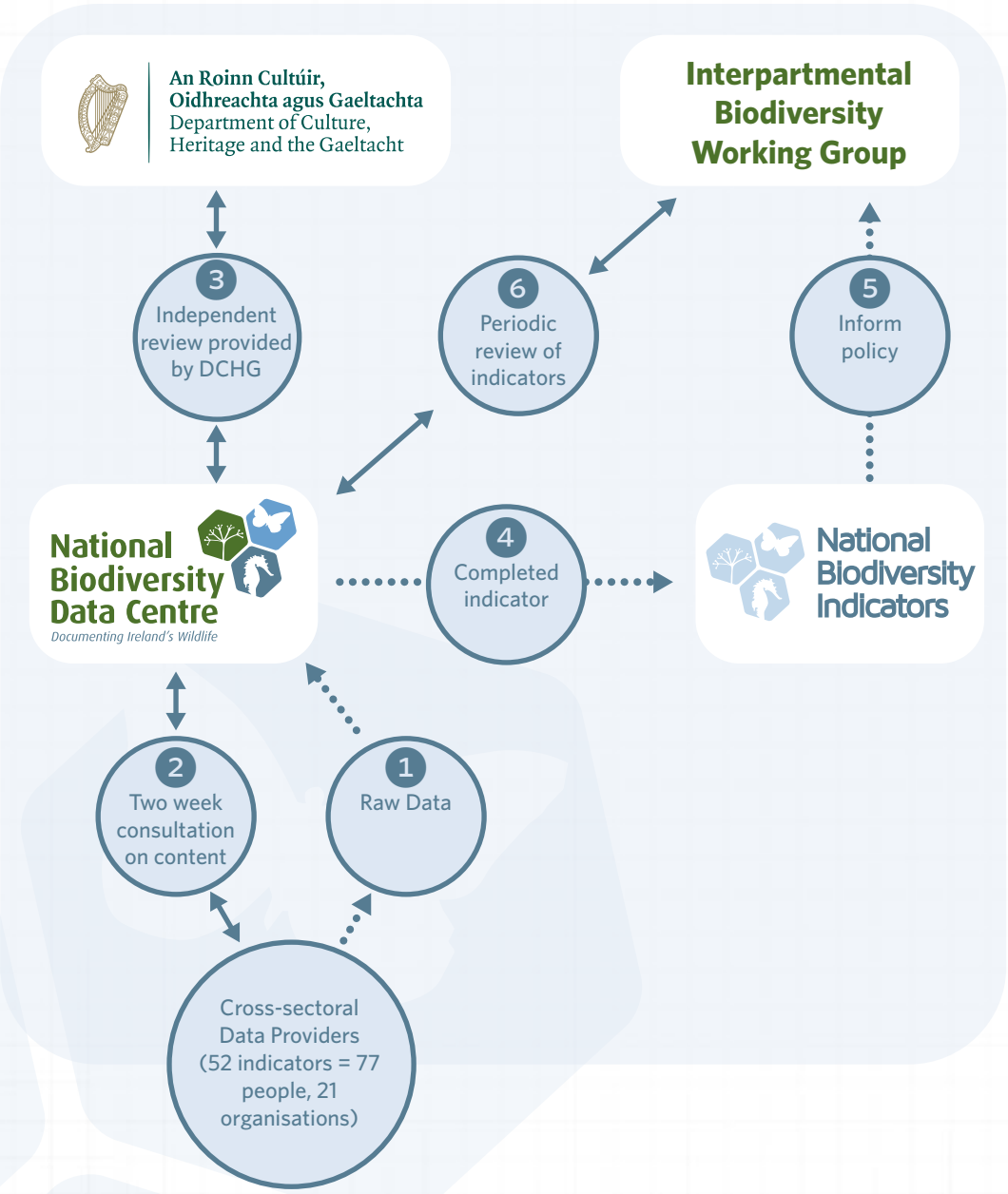
Arising from Action 3.4 in the Dept. Culture, Heritage and the Gaeltacht's 2nd National Biodiversity Strategy "Actions for Biodiversity 2011-2016", the National Biodiversity Data Centre was given responsibility for the development, collation and publication of the National Biodiversity Indicators in 2014. To date 56 indicators have been published on a dedicated website:

http://indicators.biodiversityireland.ie/

How data are collated and biodiversity indicators developed

Cooperation across sectors has been key to the delivery of the indicators. The current set of indicators is the result of 78 people across 13 governmental and 8 non-governmental organisations. Black arrows indicate data flow; white arrows indicate how the content of indicators is developed, interpreted and reviewed.

Data flow and process for indicator development and review



2 Assessing Indicators

How the indicators are structured

An ideal set of indicators needs to be broad enough to address the full range of biodiversity issues, small enough to be manageable and simple enough to be applied consistently and affordably over long periods of time. In parallel, indicators need to meet national needs whilst also contributing to global processes and supranational reporting.

The current framework is structured around eight Focal Areas, representing 32 Headline Indicators supported by a total of 71 subinicators. The eight focal areas are:

- A Awareness of biodiversity
- B Status of biodiversity
- C Threats to biodiversity
- D Measures that safeguard biodiversity
- E Measures that mainstream biodiversity
- F Benefits derived from biodiversity and ecosystem services
- G Impacts on biodiversity outside of Ireland
- H Knowledge of Irish biodiversity

How to interpret indicator status and trends

The state of each indicator is illustrated using a traffic light system:

- **indicates a positive state;**
- **indicates an intermediate state;**
- **indicates a negative state;**
- **indicates an unknown state or insufficient data**

To provide an indicative assessment of change over time, the status of the indicator has been provided for the current (most recently available data), short- and long-term. The absolute length of time specified by short- or long-term depends on how frequently data becomes available for each indicator, but where not specified should be interpreted as status over the last five (short-term) or 10 years (long-term). More detail for each indicator is provided under 'Background' at http://indicators.biodiversityireland.ie/.

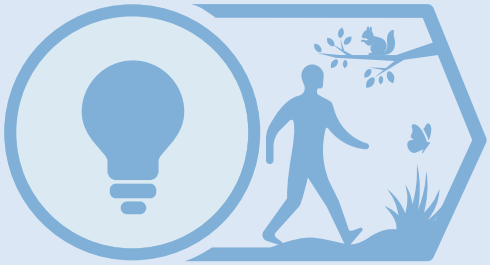
Caveats to interpretation

Some notes of caution when interpreting indicators:

- Indicators provide quantitative measures based on verifiable data that are objective, robust and minimise the subjectivity inherent in other approaches. However, it is not best practice to synthesise and interpret indicators in isolation, but ideally in combination with multiple other lines of evidence such as expert opinion, stakeholder consultation and case studies.
- As many of the National Biodiversity Indicators are relatively new, the long-term status for a majority subindicators is currently unknown.
- Interpretation can only be based on completed subindicators and this interpretation is likely to change with the ongoing delivery of subindicators.

A. Awareness of biodiversity

Increasing awareness and appreciation of biodiversity promotes a willingness to make the behavioural changes required to protect and restore Irish biodiversity. Through increased capacity building, participatory planning and education, raising awareness of biodiversity and the ecosystem services creates the 'political will' for governments to prioritise resources for conservation.



Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
A.1. Number of volunteers in biodiversity-related activities	A.1.i. Number of participants in annual citizen science-driven monitoring schemes			
	A.1.ii. Trends in membership of biodiversity-related NGOs			
A.2. Trends in the knowledge of biodiversity	A.2.i. Trends on biodiversity in the Eurobarometer	●	●	●
	A.2.ii. Usage metrics of National Parks and Wildlife Service and National Biodiversity Data Centre websites	●	●	●
	A.2.iii. Number of biological records submitted to national citizen science-driven monitoring schemes			
	A.2.iv. Frequency of use of biodiversity-related key words in print media	●	●	●
	A.2.v. Number of Irish-based searches for biodiversity-related key words using Google and other major search engines	●	●	●
A.3. Numbers in biodiversity-related educational programmes	A.3.i. Number of entries in Biological & Ecological Category of the Young Scientists competition	●	●	●
	A.3.ii. Number of school & community users/visitors to the NPWS Education Centres	●	●	●
	A.3.iii. Number of schools achieving the 'biodiversity flag' in the Green-Schools programme	●	●	●
	A.3.iv. Number of third level courses which include biodiversity*			

*Subindicator currently under review for revision or removal

Interpretation:

Based on the subindicators with data, good to intermediate status over the long term, with no significant change in the short term.

Commentary:

Three of the seven completed subindicators have positive long-term trends, five have positive short-term trends and four positive current trends.

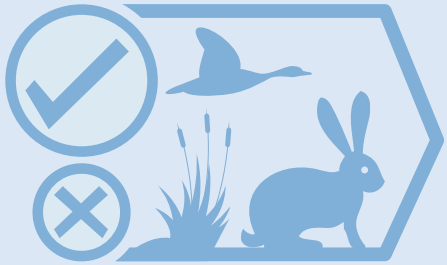
A.1. Number of volunteers in biodiversity-related activities still remains a knowledge gap and will prioritised for completion in 2019.

Subindicators supporting **A.2. Trends in the knowledge of biodiversity** show mixed improvement with the number of pageviews and new users to key websites markedly increasing, but overall internet search activity for the terms 'biodiversity', 'wildlife' or 'nature' remain largely unchanged. In addition, although 64% of people surveyed as part of the Eurobarometer felt biodiversity decline was a serious risk, this is 17% below the previous survey.

A.3. Numbers in biodiversity-related educational programmes continues to expand with the number of entries to the Biology & Ecology section of the BT Young Scientist Competition now reaching a maximum of almost 1,200 schools now achieving a Biodiversity Flag under An Taisce's Green Schools Programme.

B. Status of biodiversity

If not effectively managed, the increasing demands on the natural environment will lead to losses of biodiversity. To ensure the sustainable development of Irish society the status of our wildlife and habitats needs to be periodically monitored to identify successful management practices and co-ordinate conservation efforts at local, regional and national levels.



Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
B.1. Trends in the status of birds	B.1.i. Trends in the status of birds	🟠	🟠	🟠
B.2. Trends in the status of insects	B.2.i. Trends in the status of bees	🔴	🔴	⚫
	B.2.ii. Trends in the status of butterflies	🟠	🔴	🔴
B.3. Trends in the status of plants	B.3.i. Trends in the status of plants	⚫	⚫	🟠
B.4. Trends in threatened genetic resources	B.4.i. Status of rare breeds, cultivars and crop wild relatives (CWR)	⚫	⚫	⚫
B.5. Trends in the status of threatened species	B.5.i. Proportion of total species assessed under various Red List threat categories	🔴	🔴	🔴
	B.5.ii. Number of Habitats Directive species with green, amber or red status	🟢	🟠	⚫
B.6. Trends in the status of habitats	B.6.i. Change in area of extent of semi-natural terrestrial habitats			
	B.6.ii. Area forested with native species	🟠	🟠	🟠
B.7. Trends in the status of priority habitats	B.7.i. Number of Habitats Directive habitats with green, amber or red status	🔴	🔴	⚫
	B.7.ii. Number of freshwater habitats reported as 'Good Environment Status' under Water Framework Directive monitoring	🔴	🔴	🔴
	B.7.iii. Number of transitional and marine habitats reported as 'Good Environmental Status' under Marine Strategy Framework Directive monitoring	🟠	🟠	🔴

Interpretation:

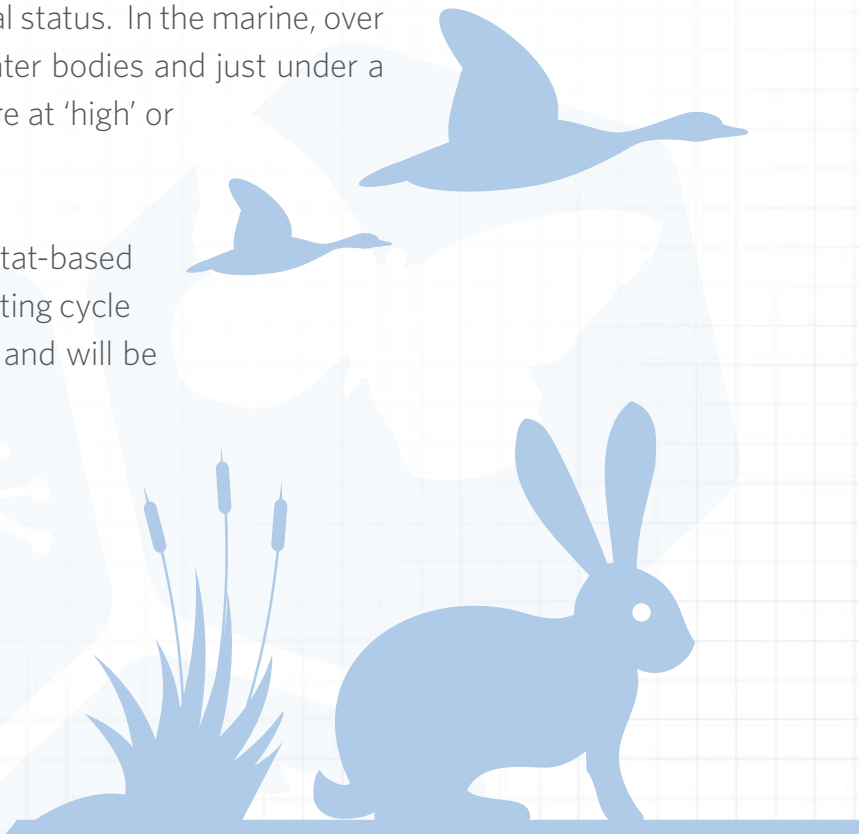
Poor to intermediate status, no significant change in the short term.

Commentary:

The poor to intermediate status of subindicators is across headline indicators and in addition, short-term declines have now been established for bee populations and long-term declines for butterfly populations. In terms of B.4. Trends in threatened genetic resources, the conservation status of the 181 crop wild relative species is currently unknown and of the 72 out 170 breeds of domesticated farm animals, 60% are currently considered of critical or endangered status.

In terms of habitats, the National Forest Inventory indicates that there has been a modest increase in the number of native plants, but a marked decrease in scrub across the areas surveyed. Over half of monitored river water bodies are at 'good' or 'high' ecological status, but declines in the number of highest quality rivers continue. In addition, less than half of monitored lakes in Ireland are of 'good' or 'high' ecological status. In the marine, over three-quarters of monitored coastal water bodies and just under a third of monitored transitional waters are at 'high' or 'good' ecological status.

The remaining priority species and habitat-based subindicators are based on 6-year reporting cycle for the EU Habitats Directive reporting and will be updated in 2019.



C. Threats to biodiversity

The most important drivers of biodiversity loss are habitat loss, habitat fragmentation, unsustainable exploitation, pollution and invasive alien species. These indicators track these drivers of biodiversity loss to support the development and implementation of strategies to reduce direct pressures on biodiversity.

Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
C.1. Trends in habitat connectivity	C.1.i. Fragmentation of protected habitats			
	C.1.ii. Change in land cover and land use	🟠	🟠	🟠
C.2. Trends in pollution impacting biodiversity	C.2.i. Number of Article 17 habitats' status affected by pollution	🔴	⚫	⚫
	C.2.ii. Number of Article 17 species' status affected by pollution	🔴	⚫	⚫
	C.2.iii. Number of pollution-derived fish kills reported by IFI	🟠	🟢	🟢
	C.2.iv. Quantity of contaminated soil sent for remediation	🟢	🟢	🟢
C.3. Trends in invasive alien species	C.3.i. Number of newly introduced invasive alien species	🔴	🔴	🔴
C.4. Trends in unsustainable resource use	C.4.i. Number of species which are not being fished sustainably	🟠	🟠	🟢
	C.4.iv. Water Exploitation Index*	🟢	🟢	🟢

*Subindicator currently under review for revision or removal

Interpretation:

Good status in the long term i.e. threat mitigation is improving, but the current status of many subindicators is intermediate or poor. This suggests either an increase in threats, or a decrease in the effectiveness of mitigation in the short-term.

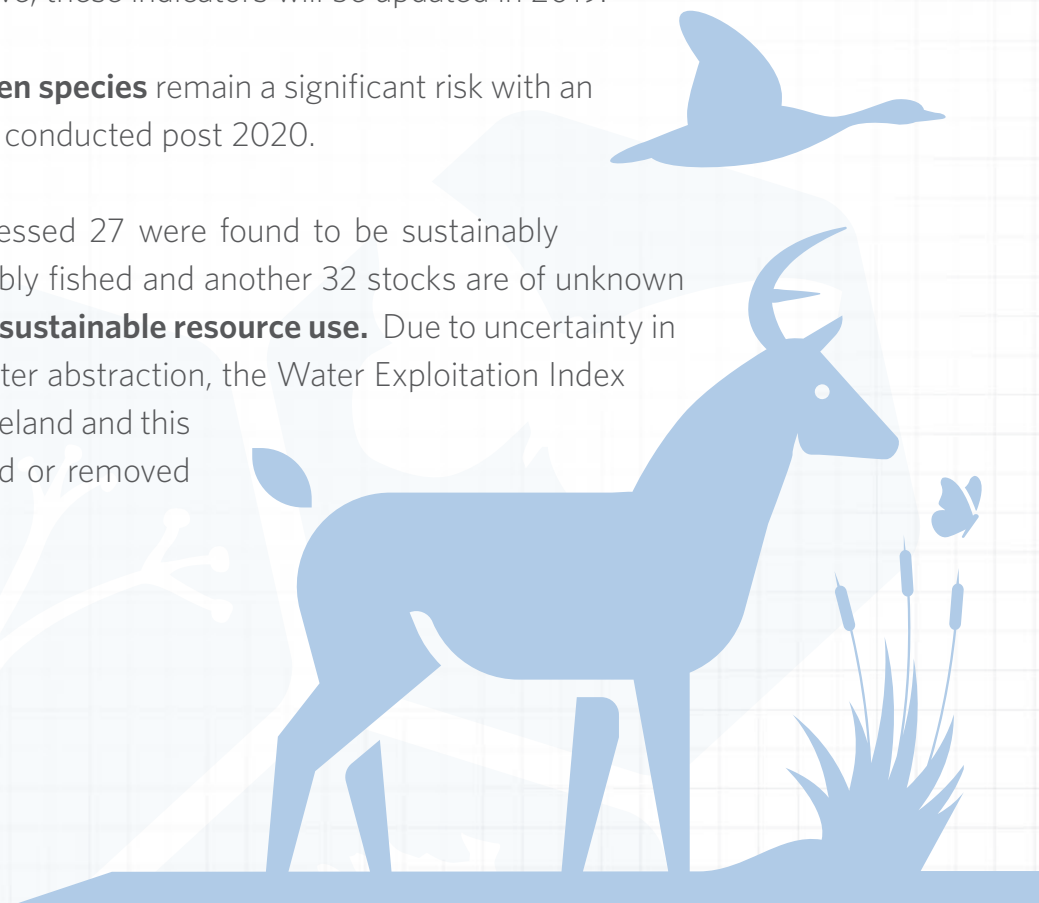
Commentary:

The area of land covered by semi-natural habitats remains 2% in **C.1. Trends in habitat connectivity.** What has changed is a 13% drop in the amount of grassland and 16% rise in shrubland as measured between 2012 and 2015 in the LUCAS surveys. The same surveys detected a decline in agricultural activity across 16% of points surveyed and an increase in 'unused and abandoned areas' by 19%; both suggesting increased levels of abandonment of agricultural land.

The current poor status subindicators relate to **C.2. Trends in pollution impacting biodiversity** and the number of EU Habitat's Directive habitats and species being impacted by pollution. Based on 6-year reporting cycle for the EU Habitats Directive, these indicators will be updated in 2019.

C.3. Trends in invasive alien species remain a significant risk with an updated assessment to be conducted post 2020.

Out of 74 fish stocks assessed 27 were found to be sustainably fished, 15 were unsustainably fished and another 32 stocks are of unknown status in **C.4. Trends in unsustainable resource use.** Due to uncertainty in its utility as a metric of water abstraction, the Water Exploitation Index is now longer reported in Ireland and this subindicator will be revised or removed in 2019.



D. Measures that safeguard biodiversity

Information on the level of implementation of national and international biodiversity protection policies, and enforcement of biodiversity protection, is a necessary and critical step in supporting effective conservation and the sustainable use of natural resources.

Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
D.1. Extent of protected areas	D.1.i. Extent of nationally designated protected areas (NHA, NP, NR)	🟠	🟠	🟢
	D.1.ii. Extent of internationally designated protected areas (SAC, SPA, Ramsar)	🟠	🟠	🟢
	D.1.iii. Area covered by the Native Woodland Scheme	🟢	🟠	🟠
	D.1.iv. Extent and location of gaps in protection of designated habitats	🟠	⚫	⚫
D.2. Level of habitat conservation plans	D.2.i. Number of sites with detailed conservation objectives	🟠	🔴	⚫
	D.2.ii. Area of peatland habitat under active restoration/ rehabilitation plans			
	D.2.iii. Level of monitoring of agri-environment schemes*			
	D.2.iv. Area of land managed as part of agri-environmental schemes			
D.3. Level of control of invasive alien species	D.3.i. Area implementing invasive alien species management*			
D.4. Amount of funding for biodiversity conservation	D.4.i. Level of national expenditure on biodiversity	🔴	🔴	🔴
	D.4.ii. Amount of funding for biodiversity leveraged from EU LIFE Programme	🔴	🟢	🟠
D.5. Level of compliance-related actions	D.5.i. Number of chartered ecologists across habitats and species groups	🟠	⚫	⚫
	D.5.ii. Number of successful prosecutions			
	D.5.iii. Number of EU pilot requests or infringements			
	D.5.iv. Number of relevant legislative instruments introduced	🟢	🟢	🟢

*Subindicator currently under review for revision or removal

Interpretation:

Intermediate status, with no significant change in the short term.

Commentary:

The intermediate status of subindicators in **D.1. Extent of protected areas** is due to the extent of terrestrial designated protected areas now being 16.8%, approaching international targets of 17% by 2020, but only 1.3% of marine territory is designated, below the international target of 10% by 2020.

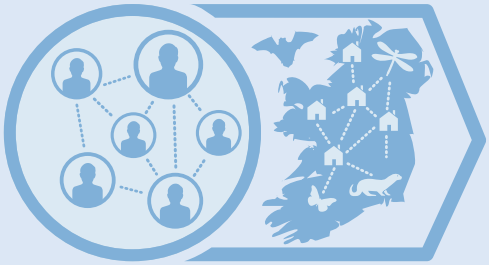
46% of designated areas under the EU Habitats Directive now have site-specific conservation objectives under **D.2. Level of habitat conservation plans,** with the area of peatland under habitat restoration and rehabilitation subindicator to be prioritised for completion in 2019.

Under **D.4. Amount of funding for biodiversity conservation,** government resources allocated to biodiversity protection and management was €143.0 million in 2016, 27% below the preceding five-year average and 47% below the 10-year average. In addition, the EU contribution to LIFE project funding in Ireland in 2017 was €2.18 million, reflecting an average level of funding across the history of the funding programme.

In addition, under **D.5. Level of compliance-related actions,** the membership of the Chartered Institute of Ecology and Environmental Management (CIEEM) has grown by 33% since 2015 to 180, with 16% of members attained Chartered status.

E. Measures that mainstream biodiversity

Integrating biodiversity into decision making at local, regional and national levels will enable Irish society to appropriately assess the consequences of biodiversity loss and co-ordinate mitigation measures across levels of government.



Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
E.1. Number of biodiversity-related policies, strategies and related instruments	E.1.i. Area covered by measures developed in the Rural Development Plan for Ireland for the protection and enhancement of ecosystem services and biodiversity			
	E.1.ii. Number of Local Authority Biodiversity Action Plans current and in place	🔴	🟠	🟢
	E.1.iii. Number of government policies, programmes and legislation with a statement on biodiversity duty	🔴	🔴	⚫
	E.1.iv. Number of biodiversity-related Memoranda of Understanding between the Department of Culture, Heritage and the Gaeltacht and other public bodies	🔴	🔴	⚫
	E.1.v. Level of compliance with the Urban Waste Water Treatment Directive	🟢	🟢	⚫
	E.1.vi. Number of plans and programmes implemented with strategic environmental assessments	🟢	🟢	🟢
E.2. Number of cross-sector guidance documents published	E.2.i. Number of biodiversity-related guidance documents published	🔴	🟠	🟢
E.3. Number of biodiversity-related personnel in national and local government agencies	E.3.i. Number of Biodiversity Officers in Local Authorities	🟠	🟠	🟠

Interpretation:

Intermediate to poor status, declining in the short term.

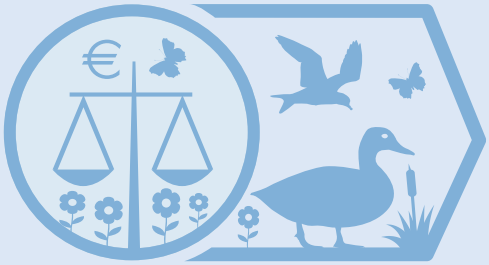
Commentary:

The good status subindicators in this Focal Area are largely due to the **E.1. Number of biodiversity-related policies, strategies and related instruments,** where the level of compliance with regards effluent, nitrogen and phosphorus under the Urban Water Treatment Directive continues to increase in parallel to a sustained level of Strategic Environmental Assessments in Plans and Programmes.

Mitigating the good status of these subindicators is the lack of progress on the number of government policies with a statement on biodiversity duty and biodiversity-related Memoranda of Understanding across public bodies. In addition, the number of Biodiversity Officers across Local Authorities remains low and static over the long-term.

F. Benefits derived from biodiversity and ecosystem services

Valuing biodiversity and ecosystem services in terms of their economic, intrinsic, health or cultural value allows society to fully appreciate the benefits from, and losses to, biodiversity and the ecosystem services it provides.



Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
F.1. Economic benefits derived from biodiversity and ecosystem services	F.1.i. Income derived from organic farming practices			
	F.1.ii. Yield produced or extent of area of crops pollinated by pollinators			
	F.1.iii. Number of farms or amount of money provided to farmers in Natura subsidies for biodiversity conservation			
F.2. Level of regulating services from intact ecosystems	F.2.i. Extent of area available for carbon sequestration (e.g. forested areas, peatlands, etc.)			
F.3. Level of well-being benefit	F.3.i. Number of licences issued for leisure fishing	●	●	●
	F.3.ii. Number of visitors to Irish National Parks*			

*Subindicator currently under review for revision or removal

Interpretation:

Unknown status, unknown change in status.

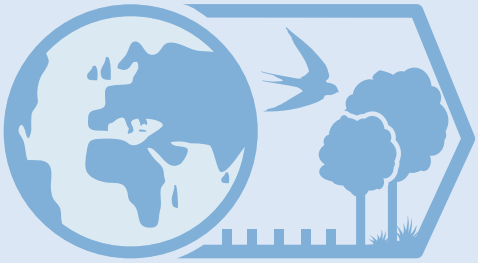
Commentary:

As evidenced by **F.1. Economic benefits derived from biodiversity and ecosystem services and F.2. Level of regulating services from intact ecosystems,** significant knowledge gaps remain in an Irish context regarding natural capital and the valuation of ecosystem services.

The number of rod licences issued for salmon and sea trout fishing under **F.3. Level of well-being benefit** has remained relatively stable over the short-term. In addition, efforts to systematically measure visitor numbers across National Parks are ongoing and this subindicator will be progressed in the short-term.

G. Impacts on biodiversity outside of Ireland

Implementing measures to protect and restore biodiversity at a national level can also support international initiatives to conserve biodiversity outside of Ireland. Only through coherent international collaboration can efforts at national levels upscale to produce geographically broad and long-term positive outcomes for biodiversity.



Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
G.1. Trends in resource mobilisation	G.1.i. Expenditure on international biodiversity and ecosystem services conservation	●	●	●
G.2. Rate of compliance with CITES regulations	G.2.i. Number of seizures made of illegally imported natural products	●	●	●

Interpretation:

Intermediate to good status, improvement in the short-term.

Commentary:

Under **G.1. Trends in resource mobilisation,** the volume of aid provided under the 'Rio marker' for biodiversity by Ireland via the Irish Aid programme in the Department of Foreign Affairs and Trade increased in 2016 by 78% on the previous year to USD$ 43.39 million.

The intermediate status of the subindicator under **G.2. Rate of compliance with CITES regulations** remains and an updated data will be made available in 2019.

Additional subindicators will be developed under this Headline Indicator once Ireland ratifies the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, a supplementary agreement signed by Ireland in 2012 to the 1992 Convention on Biological Diversity.

H. Knowledge of Irish biodiversity

Increasing public interest in biodiversity has been accompanied by growth in research and ecological monitoring, by both citizens and professionals, generating increasing volumes of biodiversity data. When effectively managed, these data underpin evidence-based conservation policy and land management at local, regional and national levels.

Headline Indicator	Subindicator	Status		
		Current	Short-term	Long-term
H.1. Trends in improving data holdings	H.1.i. Number of biological records held on biodiversity by the National Biodiversity Data Centre	●	●	●
H.2. Trends in existing knowledge gaps	H.2.i. Number of habitats and species for which status categories given as "unknown"	●	●	●
	H.2.ii. Number of gaps filled that were identified in the "State of Knowledge, Ireland's Biodiversity 2010"	●	●	●
H.3. Trends in the data-driven biodiversity publications	H.3.i. Number of species atlases produced	●	●	●
	H.3.ii. Number of Red Lists produced	●	●	●
	H.3.iii. Number of papers published on Irish biodiversity	●	●	●
H.4. Trends in monitoring programmes and assessments	H.4.i. Number of regular monitoring programmes in place and survey results published			
	H.4.ii. Number of assessments of the economic value of Ireland's biodiversity	●	●	●

Interpretation:

Good status, continued improvement in the long term.

Commentary:

Sustained growth in **H.1. Trends in improving data holdings** is evidenced by the 4.2 million records representing 16,100 species managed by the Data Centre. Of the 47 knowledge gaps identified in the "State of Knowledge, Ireland's Biodiversity 2010", nine are complete, 16 in progress and six initiated under **H.2. Trends in existing knowledge gaps,** with the number of priority habitats and species of "unknown" status to be updated with the upcoming EU Habitats Directive report in 2019.

The long-term status for **H.3. Trends in the data-driven biodiversity publications** is still positive regarding the number of peer-reviewed papers and species atlases published, but progress on the number of Red Lists produced has slowed in the short-term.

In **H.4. Trends in monitoring programmes and assessments,** the number of assessments of the economic value of Ireland's biodiversity continue to increase, particularly in the marine sector. The subindicator relating to the number of regular monitoring programmes remains a knowledge gap, but in parallel with significant engagement with non-governmental organisation in support of **A.1. Number of volunteers in biodiversity-related activities,** will be prioritised for completion in 2019.

3 Overall Assessment

The current assessment is underpinned by 52 out of 71 subindicators identified to support the eight focal areas of the National Biodiversity Indicators: **31% of subindicators have a positive current assessment, 40% intermediate, 25% poor and 4% of unknown status.** Assessing these Focal Areas in isolation from other sources of evidence, the greatest gains appear to be across awareness and knowledge of Irish biodiversity, with measures safeguarding biodiversity being relatively static at an intermediate level. Both measures mitigating threats and mainstreaming biodiversity remain positive in the long-term, but their efficacy appears to have declined over the short-term. The status of biodiversity is intermediate to poor and has not improved over the long-term. Finally, resources are required to fill knowledge gaps relating to the benefits of biodiversity and ecosystem services and our impact on biodiversity outside of Ireland.

Focal Area	Status	No. of subindicators		
		Current	Short-term	Long-term
A. Awareness of biodiversity	Good	4	5	3
	Intermediate	3	2	0
	Poor	0	0	0
	Unknown	4	4	8
B. Status of biodiversity	Good	1	0	0
	Intermediate	4	4	3
	Poor	5	6	4
	Unknown	2	2	5
C. Threats to biodiversity	Good	2	3	3
	Intermediate	3	2	1
	Poor	3	1	1
	Unknown	1	3	4
D. Measures that safeguard biodiversity	Good	2	2	3
	Intermediate	6	3	2
	Poor	1	2	1
	Unknown	6	8	9
E. Measures that mainstream biodiversity	Good	2	2	3
	Intermediate	1	3	1
	Poor	4	2	0
	Unknown	1	1	4
F. Benefits derived from biodiversity and ecosystem services	Good	0	0	0
	Intermediate	1	1	0
	Poor	0	0	1
	Unknown	5	5	5
G. Impacts on biodiversity outside of Ireland	Good	1	0	0
	Intermediate	1	1	1
	Poor	0	1	0
	Unknown	0	0	1
H. Knowledge of Irish biodiversity	Good	4	6	5
	Intermediate	2	1	0
	Poor	1	0	0
		1	1	3

4 Next Steps

The National Biodiversity Indicator programme is being constantly reviewed and the following steps will be underaken in the short-term:

- In line with the iterative review process, 16 subindicators were identified as undeliverable in the 2017 assessment and removed. This process will continue and four subindicators either revised or removed prior to the 2019 assessment.
- Continue to engage with the Biodiversity Forum and Biodiversity Working Group to facilitate iterative review of the National Biodiversity Indicators and strengthen linkages between stakeholders and data providers.
- Depending on resources in 2019, mobilise the comprehensive tagging system and search functionality on the website to facilitate the use of the indicators for variety of use cases e.g. identify which indicators of relevance to the UN Sustainable Development Goals; including thematic tags for indicators of relevance to the marine, freshwater, agriculture etc.

Further information

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The Heritage Council

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An Roinn Cultúir,
Oidhreachta agus Gaeltachta
Department of Culture,
Heritage and the Gaeltacht

The National Biodiversity Data Centre is an Initiative of the Heritage Council and is operated under a service level agreement by Compass Informatics. The Centre is funded by the Department of Culture, Heritage and the Gaeltach.