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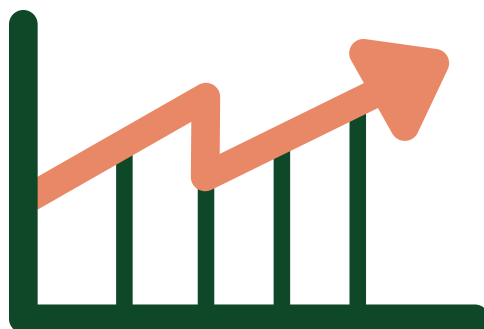
Build, connect and use the biodiversity knowledge base

4.1 Improve monitoring and evaluation systems for biodiversity action

4.2 Improve data accessibility

4.3 Promote and facilitate interdisciplinary research

4.4 Strengthen cross-border cooperation



4.1 Improve monitoring and evaluation systems for biodiversity action

Encouragingly, Ireland has been a leader in Europe in applying its [EIP](#) and [LIFE](#) funds directly to biodiversity action with an estimate of [some 70% of EIP operational group funding going directly to biodiversity targets](#). For example, Ireland has had significant success in implementing Results-Based Payments (RBPs) such as the [Burren](#) scheme and many of the EIP projects are testing, with considerable initial success, this approach at a much wider scale. The Government must rapidly scale up from pilot projects that have shown success to roll out larger, national programmes. For example, actions for agriculture identified in the [All-Ireland Pollinator Plan](#) could be applied in national agri-environment schemes. Results-based payments schemes could be applied at a much wider scale to complement the existing action-based approach to agri-environment scheme implementation.

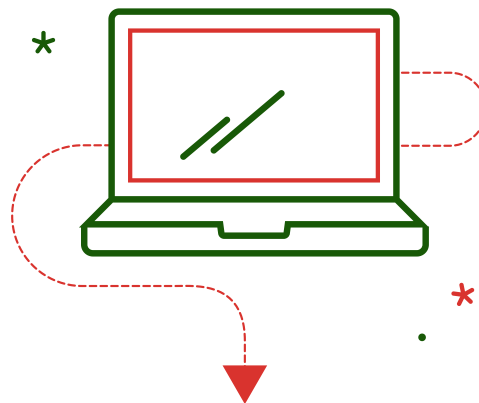
However, current monitoring and evaluation systems for biodiversity actions do not capture the true impact on or benefit for biodiversity. For example, the ADAS [evaluation report](#) for the Department of Agriculture's GLAS payment scheme found that the scheme was 96% effective when effectiveness was measured as the uptake of actions – but GLAS has not delivered significant biodiversity outcomes. This is evident in the [ADAS Year 2 Biodiversity Monitoring Report](#) where the results point to some serious failures despite the specifications being implemented as stated. For example, actions relating to the conservation

of solitary bees were implemented (sand piles), but the evaluation found that none of the sites monitored were occupied by the target species. In relation to low input permanent pasture, only a third of sites monitored met the desired quantity of floral cover. This points to serious design flaws in the national agri-environment scheme in relation to biodiversity.

Where monitoring and evaluation schemes do exist, they are underused to inform management decisions. For example, the Department of Agriculture's [National Forest Inventory](#) is one of the most sophisticated monitoring schemes in the country, but it is not clear that it is used to improve biodiversity outcomes.

While baselines are established for some Natura 2000 habitats and species, there are clear gaps. In order to improve biodiversity outcomes, biodiversity baselines must be established for the condition of ecosystems throughout the Natura 2000 network, as well as the wider countryside, coast and oceans.

In order to improve biodiversity outcomes in Ireland, clear baselines must be established, for example, for the condition of ecosystems. The [National Biodiversity Data Centre](#) needs to be strengthened and expanded to establish biodiversity monitoring as a long-term national priority and protect it from electoral cycles and changing political agendas. We recommend a review of biodiversity monitoring schemes in Ireland with a view to bringing together biodiversity data across departments and recommending existing and new monitoring schemes that can be used to inform policy.



4.2 Improve data accessibility

The [national open data portal](#) has over 3,000 results under its Environment theme and work on the national land-cover and habitat map is ongoing. Meanwhile the National Biodiversity Data Centre ([NBDC](#)) provides for the collection, collation, management, analysis and dissemination of data on Ireland's biological diversity.

But to ensure the conservation, effective management and sustainable use of biodiversity, the Government must accelerate the delivery of critical data and ensure that it is easily accessible to practitioners in a timely manner. At present, data that is crucial for research and action is stored across a range of organisations including the NBDC, the National Parks and Wildlife Service ([NPWS](#)) and the [EPA](#). Furthermore, the timeline for delivery of the national land cover maps has been extended repeatedly since January 2020. These maps are fundamental to building Ireland's knowledge base on biodiversity and their delay presents a significant obstacle to developing more detailed targets and planning for actions to stop the loss of biodiversity in Ireland.

NPWS adds to Ireland's biodiversity knowledge base through Article 17 reporting, but these reports could be more widely shared to inform research, policy and action. Ecological survey work undertaken by consultancies for wind farms and other developments should also be collated and made publicly available.

Departments, agencies and others that collect and store biodiversity data should employ Open Data principles, using and improving Ireland's national [Open Data Platform](#). The Forum recommends that the NPWS emulate the [EPA Catchments Unit](#) in communicating their research and data. In addition, ecological

survey work undertaken by consultancies for wind farms and other developments should be collated in a centralised repository so that all stakeholders can easily access the information.

Finally, biodiversity research projects must be incentivised to share knowledge and findings with stakeholders across sectors. Stakeholder engagement should occur iteratively throughout research projects, not just at the end.



4.3 Promote and facilitate interdisciplinary research

All environmental challenges are multi-faceted, including scientific, societal, economic and policy dimensions. Inter- and trans-disciplinary research is critical for mainstreaming actions and solutions for biodiversity across business, industry and society.

At a national level, the Government should stimulate and facilitate research that links ecology, economy, finance, business, health, wellbeing and other fields. This would also help to leverage funding from EU Framework Programmes, which often require an interdisciplinary collaborative approach. Programmes like the [IRC's COALESCE Research Fund](#) demonstrate how this can be done, and the activities of [Natural Capital Ireland](#) provide a good example of how links can be made between biodiversity, climate, water and economics researchers with their counterparts in the business and finance world. Conservation NGOs also undertake significant research, data gathering and conservation including working with volunteers and citizen scientists.



4.4 Strengthen cross-border cooperation

Biodiversity issues do not respect national borders and require a shared approach. As Minister Simon Coveney said recently: "Waters are sovereign but fish are not". Environmental NGOs and the academic community have recognised this. For example, the [Environmental Pillar](#) has a Brexit Policy Officer and [BirdWatch Ireland](#) engages in a range of cross-border initiatives. The [All-Ireland Pollinator Plan](#) takes an all-island approach and an [All-Island Climate and Biodiversity Research Network](#) was recently established.

Brexit is both a threat and an opportunity for this cross-border work on biodiversity. The threat is that cooperation breaks down due to increased bureaucracy and challenges posed by cross-border work. But there is also an opportunity to build upon the community and local authority engagement already occurring on issues of shared concern, and to use and link up remotely sensed data, such as [COPERNICUS](#), for all-island natural capital mapping. The Government can facilitate and encourage all-island grass-roots conservation initiatives for shared issues such as peatlands, hedgerows and wading birds.

Finally, Invasive Species Ireland was disbanded several years ago. This has greatly hampered cooperation in this critical area. The Government should strengthen and fund Invasive Species Ireland as a platform for increased cross-border cooperation.

