



SFI Public Service Fellowship 2023

1. Name of Governmental Department or Agency

National Parks and Wildlife Service, Department of Housing, Local Government and Heritage

2. Title of the Project

NPWS1 Translating research into actionable policy: developing a habitat research framework for Ireland

3. **Description of the Project**

The National Parks and Wildlife Service (NPWS) are the state body responsible for the conservation of habitats in Ireland, in particular the status of habitats and species protected under the EU Habitats Directive. The Habitats Directive underpins the conservation of habitats and species in Ireland; protection of biodiversity is primarily afforded by the Habitats Directive (in combination with the Birds Directive) and its principal aim is to "contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States". However, in line with the global trend of declining global biodiversity, many habitats in Ireland are in an unfavorable status with almost half undergoing ongoing declines in the past two decades. This deterioration is mainly due to disturbances associated with human activities such as land drainage, eutrophication of water, unsuitable grazing levels and the proliferation of invasive species.

Under Article 11 of the Habitats Directive, Ireland is obliged to undertake surveillance of the conservation status of key natural habitats and species, and to report to the European Commission on their status and on the implementation of conservation measures taken to restore them to favourable status. Conservation status is assessed holistically and based on the range, area, structures, functions and threats to the existing and prospects of the habitat. However, holistic habitat research in Ireland has largely been funded and carried out on a short-term basis as part of discipline-specific or restricted multidisciplinary research projects. This has led to a lack of continuity and forward planning in the sector; as a result, the multidisciplinary datasets for required for conservation management are either sparse, incomplete or absent. The lack of a coordinated and standardised approach to habitat research has often led to poor cost-efficiency, data inconsistencies and inaccessibility, duplication of support services across stakeholders and lack of translation of research outputs into conservation policy.

Addressing the deficit in systematic observation of habitats has become an increasing national priority, as shown by inclusion of ecosystem monitoring within both the Climate Action Plan and the Biodiversity Climate Change Sectoral Adaptation Plan. The main objectives of this project include:

- Providing policy-relevant information needed to address the strategic demands of NPWS and its responsibilities in habitat monitoring and reporting.
- Increasing the quality, standardisation, design and optimisation of habitat monitoring schemes across agencies and sectors.



- Helping to streamline investments and improve cost-efficiency in habitat research across the public sector.
- Informing the development of a coherent scientific strategy that will maximise the economic and policy benefits of national habitat research.

4. Project Scope

The overall structure of the project workplan aims to address the major project objectives outlined in section 3. Specific tasks will include:

Task 1: Review of National Habitat Research Infrastructure

The current habitat research landscape in Ireland will be examined to identify strengths and gaps based on an analysis of representativeness regarding habitat range, diversity and research challenges. Existing and planned data, projects and research infrastructure will be catalogued and assessed using an appropriate framework of observations and the attributes (location, ecosystems, facilities, measured parameters etc.) documented.

Task 2: Habitat Research Framework

This task will define key technical concepts, requirements and methodological protocols needed to develop a habitat research framework for Ireland. This framework will provide the structured approach to habitat data collection needed to support government policy and ensure stakeholders have the highest quality technological and methodological protocols at their disposal.

Task 3: Communication and Dissemination

This task will include organisation of meetings and stakeholder workshops, attendance and presentation at seminars and conferences, and preparation of technical reports.

5. Skills/Expertise Required

The skills and expertise required include:

- Experience carrying out policy-relevant multidisciplinary habitat research
- Knowledge of the national and European scale habitat/ecosystem research infrastructure landscape
- Ability to review and synthesise peer-reviewed and grey literature
- Experience in stakeholder engagement in both academia and policy-making
- Strong communication skills, both in technical report writing and presentation and the area of ecosystem research

6. Expected Outputs of Project

Expected outputs and benefits of this project include:

- Habitat research infrastructure review and database
- Framework for policy-relevant habitat research
- · Research and development of new methods in conservation assessment of habitats
- Improved strategic planning and goal setting within NPWS science unit
- Strengthened connections between Government and the public research system
- High level scientific input to government working groups on biodiversity, water and climate change



7. Working Arrangements

Placement would be based in the National Parks and Wildlife Service, King Street North, Dublin. Flexible and remote working arrangements will be also accommodated.

8. Expected Timeline

The project is expected to take 12 months to complete, so the researcher could opt for a 12-month full-time or 24-month part-time placement.

9. Contact Details

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