NATURA COMMUNITIES

Erriff River Corridor
Rhododendron Mapping and Treatment Project

Natura Communities Case Study

Project Background

The Erriff River sits in a U-shaped valley along the southern boundary of the Mweelrea/Sheeffry/ Erriff Complex Special Area of Conservation (SAC) within the Natura 2000 network. The valley extends north-eastwards from the head of Killary Harbour. While not all of the lands within the project's target area were wholly within the designated lands, they are all connected from an ecological sense, so therefore strategic for the conservation of the SAC. A number of the qualifying interests for the SAC found within the Erriff Valley and impacted by Rhododendron include wet heaths, blanket bogs and important water courses. The Erriff River is recognised as a salmon fishing river, and freshwater pearl mussel are also present.

The Problem

The conservation objectives for the Mweelrea/Sheeffry/Erriff Complex SAC note the presence of Rhododendron on both the wet heath and blanket bog habitats. There is a set acceptable target of less than 1% cover for invasive species on these designated lands, in order to maintain the ecological integrity of the protected habitats. In a survey carried out in 2010, the impact of Rhododendron was determined to be medium, with less than 1% cover for both habitat types. Given the propensity for Rhododendron to spread easily, it was considered likely that the percentage cover has substantially increased and this was confirmed in a preliminary scoping survey. The target area for this project was in the lower half of the Erriff River Valley extending from the head of Killary Harbour to just north of Glennacally Bridge.

Project Aims

Determining distribution and developing an index of infestation levels are essential so as to calculate the costs associated with eradicating Rhododendron from lands and controlling spread. Learnings from the project are to inform future programmes. The main aims of the project were:

- To develop and demonstrate a Rhododendron control project within the Erriff River Corridor
- To inform the development of an eradication plan for the Mweelrea/Sheeffry/Erriff Complex SAC
- To build capacity in the local community to manage the threat of invasive non-native species

Project Stages

- Stakeholder engagement
- Mapping the distribution and scale of Rhododendron infestation
- Rhododendron control
- Report on the works undertaken

Consultation

Private landowners and relevant state authorities were consulted before the project started to ascertain any concerns about the works to be undertaken. All were found to be supportive.

Mapping

The aim of this element of the project was to determine the distribution and levels of infestation, which could help calculate costs associated with removal and in turn to inform future eradication programmes. Establishing a baseline of distribution/infestation is also important to facilitate future monitoring. The mapping project consisted of both a desktop review and field surveys. The design of the field survey was partly informed by the desktop element and was based on a 1km grid design. Levels of infestation were established through the use of a five-point scale ranging from Absent to Very Severe. Surveyors recorded Rhododendron and other invasive species encountered, making note of the type of infestation e.g. linear, clumps or single plants. Other physical characteristics of the survey location were also recorded including soil type, peat depth, wetness, current and target habitat type. Where access to survey locations was not possible an UAV (Unmanned Aerial Vehicle/drone) was used combined with surveys from suitable vantage points.

Treatment & Results

Treatment work was overseen by a professional ecologist. Stem treatment/injection method was used for the treatment of plants. This involved the scarring of Rhododendron stems below the lowest growth node with the subsequent immediate application of a Glyphosate-based herbicide (containing a vegetable derived blue dye). The use of a 1.25L pressure sprayer allowed for the targeted and controlled usage of herbicide to the scarred stems. Where possible, chainsaws were used for scarring stems as trials found them to be three to four types faster than the hatchet method. Treatments were found to be effective with high mortality rates in treated plants.

Who is involved?

The Erriff River Corridor Rhododendron Mapping and Treatment Project is a community led project being headed by Leenane Development Association. This project is funded by National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage via LIFE IP Wild Atlantic Nature, a project that focuses on adding value to our Natura 2000 network of sites for landowners, communities and the wider public, with a particular focus on blanket bogs.

- Leenane Development Association
- LIFE IP Wild Atlantic Nature
- Wetlands Survey Ireland
- Department of Housing, Local Government and Heritage
- Inland Fisheries Ireland
- Local Authorities Waters Programme (LAWPRO)