

Managing Bracken in the MacGillycuddy Reeks

Bracken (*Pteridium aquilinum*) is a common fern in the Irish countryside, easily recognised by its tall, bright green fronds which can reach over 1.5m in height and turn brown in Autumn. It is a species that has adapted well to its environment surviving for millions of years and being found on all continents, with the exception of Antarctica. Bracken is one of the oldest known plants and has been found in fossil records from 55 million years ago.

Bracken was originally a woodland species which has spread into many other habitats. It tolerates a range of soil types from very acidic to very alkaline. Bracken is frequently found in upland habitat such as dry and wet heath and some areas of blanket bog, although its spread is often limited by the wetter bog habitat. Under certain conditions, such as where there has been heavy grazing or fires, bracken can become dominant in upland areas and where it does so; it can shade out the native vegetation leading to the loss of rare and protected heath and bog habitats.

The MacGillycuddy Reeks is an area of high nature conservation value and an important area of scenic beauty. Sadly, there are many sites in the Reeks where bracken is spreading and threatening the habitats. The MacGillycuddy Reeks European Innovation Partnership (EIP) Project, a locally led agri-environmental project, led by South Kerry Development Partnership, funded by the Department of Agriculture, Food and the Marine as part of Ireland's Rural Development Programme 2014-2020 which aims to improve the sustainability and economic viability of the farming in the MacGillycuddy Reeks, is working with local farmers in Reeks to try and address the spread of bracken on a number of sites. Where bracken comes to dominate the vegetation it can lead to the loss of grazing land and protected habitats, it can be poisonous to livestock and it can provide a refuge for ticks which can cause Lyme's disease.

Studies in the UK have linked the increased spread of bracken in the uplands to several factors including a decline in cattle grazing, sub-optimal management of heather, increased sheep grazing and a cessation of bracken cutting. In the past bracken would have been cut and used for bedding for animals and as packaging for earthenware. Many of the factors identified in UK studies are

recognisable in the MacGillycuddy Reeks. In more recent years, sheep farming has come to be dominant with cattle grazing becoming largely a thing of the past. The dwarf shrubs such as heather and bilberry and the associated mosses which characterise these habitats are often suppressed under current management practices opening up bare ground and allowing bracken to spread with minimal competition.

Working closely with the farmers in the Reeks, The MacGillycuddy Reeks EIP Project has been tackling this issue using a number of different treatment methods including spraying with Asulox using a handheld knapsack, trampling with cattle to crush the young fronds and cutting. The methods chosen are site specific depending on the density of the bracken and the nature of the terrain. Cutting is generally carried out along the edges of watercourse where spraying and cattle trampling are not permitted to protect the water quality. Native breeds of cattle such as the Kerry or Droimeann cattle are being introduced for short periods to trample emerging fronds where the terrain allows and the Project Team have facilitated a cattle B&B system which supports farmers in doing this without having to purchase cattle themselves. Spraying is carried out where necessary, such as where the bracken infestations are particularly dense and/ or the terrain is too rocky for cattle. The physical effort required to carry out this work in steep, rocky mountainous terrain cannot be underestimated and the farmers must be commended for their work. Following treatment, the project team are working with farmers to develop sustainable management practices such as minimising burning events, controlled grazing with sheep and regular summer grazing with cattle all of which will help control the spread of bracken in the long-term. For more information please contact the Project Team.

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