

Heritage Week 2021

Irish Uplands Forum: Biodiversity Walk on the Hill of Howth

11am, Saturday 14th August, 2021

A small band of explorers, led by IUF Research Director and expert **Ecologist, Dr. Mary Tubridy**, walked up the Hill of Howth along the Greenhollows track on a damp August morning as part of Heritage Week 2021.

Our aim was to investigate the upland ecology of this unique peninsula on the peri-urban fringe of Dublin city in Fingal County. The hill is formed of ancient Lower Palaeozoic siliceous rocks which create an acid soil substrate, unlike the alkaline soils on the Dublin lowlands below. The Hill of Howth is a designated Special Area of Conservation (SAC) under the EU Habitats Directive and is protected as a zone of scientific interest. Until the nineteenth century, the Hill of Howth was farmed with sheep and goats grazing the uplands, contributing to the ecology we see today.

Towards the top of the hill, Mary showed us the typical low-lying plant assemblages of an acidic dry heath, including the dominant ling heather and autumn gorse, as well as an occasional bell heather and fern (bracken), growing on thin peaty soils. This zone was burnt in a wildfire about four years ago and it was great to see how nature regenerates itself. We observed a few new alien arrivals, including birch trees (although a native Irish species, they are not typical of a dry heath), as well as a cotoneaster and spruce tree, introduced by humans in memory of loved ones.



Dr. Mary Tubridy (red) demonstrating the ecology of dry heath uplands of the Hill of Howth

Mary discussed ecological experiments undertaken in association with Fingal County Council to control the vegetation and maintain the low lying dry heath species. An ecological traverse was undertaken initially to establish the baseline and then a small herd of goats was introduced to graze a fenced-off experimental area.

The results were monitored over time and it was found that the goats happily grazed the heath plants, but also loved the invasive young birch and bracken plants, thus keeping them under control.

We observed small legacy excavations of Howth Stone here on the hill, which have now become micro-habitats for wetland species, including reeds, purple moor grass and willow on the margins. These partially filled excavations are home to many invertebrates and frogs in the wetter seasons.

Following recent fires on a nearby zone of the Hill of Howth in July 2021, it is clear that keeping the dry heath assemblages in good health would be beneficial to surrounding properties by reducing the fuel load. Fingal County Council is thus planning to introduce a herd of managed Irish goats to the Hill to protect the dry heath ecology and to graze off recently introduced firebreaks on the hill.



Dr. Mary Tubridy shows the bracken and birch incursion to the Bog of Frogs on the Hill of Howth

We also visited the Bog of Frogs, which was once a low-lying hollow of c. 50m long on the edge of the Howth Castle estate, but which was artificially drained, leading to a loss of wetland species and the incursion of birch and bracken. Fingal is considering rewetting this ‘bog’ by blocking the drainage to enable the habitat to restore itself and regenerate the sound of frogs once more.

Thanks to Dr. Mary Tubridy and the Heritage Council for facilitating this very interesting event during Heritage Week 2021.

Irish Uplands Forum, August 2021