

# ANNUAL REPORT: LANDSCAPE ARCHAEOLOGY AND ENVIRONMENT IN IRELAND: THE ENVIRONMENTAL AND CULTURAL HERITAGE OF THE IRISH LANDSCAPE 2018

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*The relict farming landscape of Clare Island, Ireland*

This field and laboratory-based program was principally a teaching focused program, aimed at using a diverse range of landscapes of the Midlands and West coast of Ireland as an outdoor classroom, examining the environment from the bedrock up.

The Program was designed to be holistic in nature and afforded the students insights into the landscape: from the bedrock geology that literally forms the foundations for the topography to the glacial and post-glacial geomorphology, ecology, archaeology and traditional and contemporary economy (and indeed mindsets) of the Midlands and West coast of Ireland.

The diversity of landscapes assessed was exceptional; from the Midlands of Ireland, formed on a foundation of Carboniferous Limestone but shaped by the formation of a series of interconnected lakes as the last ice sheets retreated at the end of the last ice age. Marls formed in the beds of the lakes, sealing in the dying plant remains and forming an anaerobic environment in which peat bogs formed and expanded into the landscape. The same foundation of Carboniferous Limestone makes up the Burren region but here, due to the forces of the Atlantic Ocean and the exposure of the western seaboard, meant that instead of bog formation, the landscape is in many places devoid of soil cover, resulting in a dramatic karst limestone pavement. The program focused heavily on the premise 'Why here?' in viewing the landscape from the eyes of the first people that explored it. This facilitated the identification and survey of archaeological sites as wide ranging as fulachta fiadh (Bronze Age cooking sites), wedge tombs, holy wells, and relict field systems (from Neolithic to famine period).

Whilst the program focused on teaching, it included several phases of sample collection, analysis and interpretation, feeding into the baseline data for the town with regard to the well-being of the local environment, in particular through the river surveys.

These surveys, undertaken in the two major rivers in the town of Birr, at various points of different flows and overall environment, allowed for an assessment of the water quality through an analysis of the aquatic invertebrates.

The program looked at the new challenges to river bank stability – the threat of Himalayan balsam as it erodes the root web of native species and allows for more erosion in winter flooding. A survey of the flora of the rivers, and in particular the plotting of the occurrence of the invasive species Himalayan Balsam along the riverbanks, fed into local community environmental protection program.

The students spent a day with the Heritage Officer for County Offaly, Amanda Pedlow, and this work set the groundwork for a program of environmental research and service learning which will commence in 2019 with the IFR Summer Birr Environmental Science Program.