Surveying Knockloon: Revealing a ceremonial complex on the edge of the Burren

The Irish Fieldschool of Prehistoric Archaeology www.prehistoricfieldschool.ie are conducting surveys and excavations on a recently identified ceremonial complex on Knockloon Hill, in Leamaneh townland, on the edge of the Burren in county Clare. With Royal Irish Academy funding, we commissioned the director of Western Aerial Survey, Dr Paul Naessens, to carry out a detailed aerial survey of the hill using a SUA (a small unmanned aircraft or drone). The drone captured numerous, overlapping photographs of the barrow, a newly discovered topographical enclosure to its west and the wider hillside. The resultant data was then processed using photogrammetric software: Pix4d Mapper and Agisoft photoscan, to produce 3D models and pointclouds, digital surface models and contour maps. Some of the models can be viewed on our sketchfab page https://sketchfab.com/irishfieldschool.

The drone survey recorded detailed topographic information of the prehistoric barrow and other enclosures and revealed traces of several ancient linear features and more recent ploughing which are not perceptible on the ground. The information captured by the drone was used to form a 3D framework over which we were able to drape our geophysical survey data and then plan our excavations. To date, our geophysical survey has discovered four new enclosures on the hill and our excavations on the barrow have produced burial and other ceremonial activity dating from the Chalcolithic (2500 BC) to the early medieval period (6-9th century AD).

The survey and excavations on Knockloon hill are adding significantly to our understanding of burial and ceremonial practices in the Burren and wider Ireland during several periods, particularly the Chalcolithic/Early Bronze Age and Iron Age/early medieval periods. During the Chalcolithic/Early Bronze Age, some people were being buried on the barrow on Knockloon hill, while on nearby Roughan Hill others were being buried in wedge tombs. This project has the potential to untangle the social reasons that lie behind that diversity. During the Iron Age/early medieval period more burials and other ceremonial activities, such as feasting and high-status crafts were carried out on the barrow. These activities echo practices carried out at Irish royal sites and their investigation has the potential to help us understand how they operated in a more local context.
At least one image must accompany the report, though one can upload multiple images if they wish. Only images of the highest quality and at least 880x440mp will accompany the report on the Academy’s website and in the annual review.