### Title
Quantifying woodland resource usage in the Irish midlands using archaeological and palaeoecological techniques

### Contractor
TCD

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#### NRA Mentor
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#### Start date
Dec-08

#### End date
Nov-11

#### Status
On-going

#### Type of project
Research Fellowship: PhD (Ellen O’Carroll)

#### Cost
€136.7k

#### Project reference
NR/250/04 PO 6904

### Description
Archaeological investigations associated with the national roads construction programme have added significantly to the body of archaeological knowledge in Ireland. Considerable resources have already been invested by the NRA into archaeological site investigations in Ireland over the past decade, and detailed analysis of woodland exploitation offers an ideal framework within which past human exploitation is closely linked with the environment. This research project focuses on a retrospective detailed and consolidated reconstruction of the woodland environment and usage through various time periods along a section of the N6 which runs through Counties Westmeath and Offaly. The project will evaluate the areas where enhancements to our store of knowledge have occurred and report on their significance.

The project will include an evaluation of the techniques used by the NRA to identify and mitigate archaeology as part of the national roads programme, the production of a database of archaeological sites uncovered to date on NRA schemes with predictive modelling function, and an assessment of the palaeo-environmental analysis of sites on national road schemes.

### Objectives
The project has two principal aims:
- to provide a retrospective detailed and consolidated reconstruction of the woodland environment and usage through various time periods along a section of the N6.
- to improve archaeological practices in the field as well as in the post excavation stage.

### Benefits
This project offers the opportunity to collate the archaeologcial information obtained from a number of investigations on different schemes and place it in historical context. This adds greater value to the information collected and providing better value for money to the taxpayer.

There is a notable absence of definitive sampling methods in the area of environmental archaeology. The considerable volume of wood and charcoal samples available from this area will facilitate a robust assessment of the methods used in sampling, analysing and reporting wood and charcoal remains in archaeological settings. One of the aims of the project is to develop international best practice for sampling, and analysis of such samples, that will deliver more reliable and cost effective results in on-going archaeological investigations.

### Outputs
Integration of new and existing wood and charcoal data from a range of archaeological settings with palaeoecological data from a lake and small hollow sites to deliver a comprehensive reconstruction of woodland utilization since the Bronze age in the Irish Midlands.

Establishment of best practice for wood sampling and analysis on large infrastructural archaeological investigations. This will ensure both more reliable (and hence, useful) results and more cost effective use of resources in the future.

Various national and international papers.