THE DISCOVERY PROGRAMME
Ar Thóir Na Seàn

2005 ANNUAL REPORT
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message from Chairman</td>
<td>3</td>
</tr>
<tr>
<td>General Review of 2005</td>
<td>4</td>
</tr>
<tr>
<td>Dissemination of Information</td>
<td>5</td>
</tr>
<tr>
<td>Expenditure during 2005</td>
<td>5</td>
</tr>
<tr>
<td>Staff Matters</td>
<td>5</td>
</tr>
<tr>
<td>GIS Survey</td>
<td>7</td>
</tr>
<tr>
<td>Project Work in 2005</td>
<td></td>
</tr>
<tr>
<td>Barrow Valley Project</td>
<td>10</td>
</tr>
<tr>
<td>Lake Settlement Project</td>
<td>11</td>
</tr>
<tr>
<td>Medieval Rural Settlement Project</td>
<td>14</td>
</tr>
<tr>
<td>Environmental Work</td>
<td>22</td>
</tr>
<tr>
<td>Appendix 1 Members of Directorate</td>
<td>24</td>
</tr>
<tr>
<td>Appendix 2 Members of Council</td>
<td>25</td>
</tr>
<tr>
<td>Appendix 3 Meetings of Directorate and Council in</td>
<td>26</td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
<tr>
<td>Appendix 4 Staff</td>
<td>27</td>
</tr>
<tr>
<td>Appendix 5 Staff Publications 2005</td>
<td>28</td>
</tr>
<tr>
<td>Appendix 6 Staff Lectures/Presentations 2005</td>
<td>29</td>
</tr>
<tr>
<td>Appendix 7 Discovery Programme Seminars</td>
<td>32</td>
</tr>
<tr>
<td>Appendix 8 Presentation to the Joint Oireachtas</td>
<td>33</td>
</tr>
<tr>
<td>Committee on Environment and Local Government,</td>
<td></td>
</tr>
<tr>
<td>2nd February 2005</td>
<td></td>
</tr>
<tr>
<td>Extract from Audited Accounts 2005</td>
<td>35</td>
</tr>
</tbody>
</table>
Message from the Chairman

It is a pleasure to introduce this Annual Report for the year 2005. Due to the early completion of the audit for that year by the Comptroller and Auditor General we are able to catch up on previous years and include here an extract from the draft accounts for 2005. The complete accounts will be presented to the 2006 AGM of the Discovery Programme Ltd.

2005 proved to be another productive year for the Discovery Programme. Full descriptions of the organisation’s work will be given below; here I can only mention some of the highlights. The important excavation of the Mesolithic site at Derragh Island, Lough Kinale - part of the Lake Settlement Project - was continued and the excavation brought to a conclusion. The draft report of the first module of that project - the general study of the Lough Kinale area - was refereed by three separate specialists and subsequently progressed towards publication. The Medieval Rural Settlement Project (MRS) excavation at Tulsk in Co. Roscommon - having revealed the remains of a totally unexpected stone castle - was continued while the other modules of the research programme - the Dublin hinterland study and the investigation of the manor at Castlemore, Co. Carlow - were also progressed with very interesting results. The publication of Discovery Programme Reports 7, which was totally devoted to the MRS, was another important landmark for that project.

The publication backlog from the Phase I projects was considerably reduced this year, with three separate volumes appearing: two relating to the North Munster Project as well as the study on the landscape and kingship of Tara. The monograph on the work of the Ballyhoura Hills Project was sent to the publishers and will appear in 2006, and further work was undertaken towards bringing the results of the Western Stone Forts Project to print at a later date.

As before the staff of the Discovery Programme were very active in communicating the results of their work, as indicated by the list of publications and presentations outlined below. A notable new feature this year was the organisation, in collaboration with the Royal Society of Antiquaries of Ireland, of a series of important and very well attended seminars at the Society’s house outlining in a thematic way the results of the huge increase in excavations mainly associated with infrastructural development projects.

We are, of course, very grateful for the continuing interest in, and support for, our work by the Heritage Council. We are especially grateful for an additional grant from the Council this year which allowed us to purchase a terrestrial laser scanner. For the past two years we had been investigating the potential use of this new 3D survey technology and, among other applications, we intend to make extensive use of it at the Tulsk excavation in order to improve the speed and quality of site recording.

Finally, I would like to take this opportunity to congratulate all the staff, and our collaborators in other institutions, on another excellent year of research as well as the dissemination of results.

Dr Michael Ryan
Chairman
Although formally we had no corporate plan in place in 2005, the work of the Company was still guided by aspects of the Discovery Programme Plan 2002-2004, which had been submitted to and approved by the Heritage Council in September 2001. The main elements of this plan were still current and it was felt that a new plan should ideally await the arrival of the new Directorate to be appointed as of January 2006. The main constraints on our research work as in previous years arose from limited financial resources. All four Phase I projects (the Ballyhoura Hills Project, the North Munster Project, the Tara Project and the Western Stone Forts Project) had been completed several years ago but work on the publication of the various final reports was still ongoing during 2005. For reasons of economy it had been agreed that our monographs would be published in future in association with commercial publishers rather than through the Royal Irish Academy, as had been the previous practice. Accordingly the main results of two Discovery Programme Phase I projects - the two volumes for the North Munster Project and Tara: Kingship and Landscape were published in this way at the end of 2005. In addition the monograph for the Ballyhoura Hills project was in production with a commercial publishing company and will appear before the end of 2006. Work also continued on bringing the draft of the Western Stone Forts project report up to publication standard. As part of the review of our publication procedures it had been agreed that the existing arrangement with the Royal Irish Academy should be retained for the publication of the Discovery Programme Reports (DPR) series. A volume of DPR (No. 7) dealing mainly with the Roscommon module of the Medieval Rural Settlement Project was published in July. The main innovation with this volume was that all the design and layout work was done in-house by the GIS/IT/Survey section, which resulted in considerable savings on previous editions as well as a number of useful lessons regarding more economical forms of publishing.

The Barrow Valley Project got into full research mode. A fuller account of this work will be found below, as also for each of the other projects. The Lake Settlement Project had another very successful summer season of excavation at the Derragh Island site adjacent to Lough Kinale. The Medieval Rural Settlement Project continued in full research mode with another very exciting and successful excavation season at Túlsí, Co. Roscommon, as well as with developments in all the other areas and modules of the Project, perhaps especially at the Castlemore site in Co. Carlow.

Under the 'restructuring' arrangements agreed in 1998 with the Department of Arts, Heritage, Gaeltacht and the Islands, in 2005 the Company accounts (for 2004) were audited for the seventh time by the Comptroller and Auditor General. As the Discovery Programme is funded now directly by the Heritage Council, relations with the Department of the Environment, Heritage and Local Government are restricted to a small number of specified matters, such as pensions. The Company continued to liaise with the Department on the pensions issue, especially the transference of the support staff from the older Scottish Provident scheme to the New Ireland scheme of which the research staff are members.

Relations between the Discovery Programme and the Heritage Council, our funders, continued to be excellent. The Chief Executive of the Heritage Council is a member of the Directorate and is also chairman of our Audit Committee. The Chief Executive Officer of the Discovery Programme was an active member of the standing committee on archaeology of the Heritage Council as also was Ms Margaret Gowen, a member of the Directorate. Discovery Programme staff were in frequent contact with staff of the Heritage Council throughout the year, especially with the Archaeology Officer, the Human Resource Manager and the Financial Controllers. Towards the end of the year the Heritage Council generously made an extra allocation of €190,000, which was used mainly to purchase some major new items of equipment (see below).

A successful fieldtrip, involving members of the Directorate, Council and staff took place on 25 and
26 July. Among the sites visited was the Lake Settlement Project excavation at Derragh Island, the Medieval Rural Settlement Project excavations at Tulsk, a proposed (MRS) excavation site in nearby Carns townland, and Inch Island in Lough Gara where it is hoped that the next phase of the Lake Settlement Project will be based. The fieldtrip was also used as the occasion for a joint meeting of the Directorate and Council and a separate meeting of the Directorate. At those meetings, members continued to address the issue of formulating the next cohort of projects following the completion of the present research programme as well as examining the possibility of some structural changes to the Discovery Programme governance.

In terms of the government’s Code of Practice for the Governance of State Bodies, during the year the Directorate adopted a Code of Business Ethics for members and staff, and also a Risk Assessment Plan.

In February the CEO was invited to speak to the Joint Oireachtas Committee on the Environment, Heritage and Local Government, in relation to the M3-Tara controversy (see below). The contribution was reported in the media as were the speeches made by Dr Edel Bhreathnach and Dr Tom O’Dwyer, Chairman of the Heritage Council, at the well-attended launch of the Tara book at the Royal Irish Academy on 14 December.

The matter of relocating the Company to new premises was kept under review throughout the year. As in the previous year, it had been hoped that accommodation in the house of the Royal Society of Antiquaries of Ireland, 63 Merrion Square, would become available but this did not happen for reasons beyond the control of either organisation. We are now assured that this accommodation will become available in 2006 and, therefore, it was agreed to postpone the move.

In November the Council met to elect, by secret ballot, five members of the incoming Directorate which is due to take up office in January 2006.

Dissemination of Information

Four Discovery Programme publications appeared in 2005.

Discovery Programme Reports 7
Tara: Kingship and Landscape, edited by Dr Edel Bhreathnach
The North Munster Project - Vol. 1: The later prehistoric landscape of south-east Clare, by Dr Eoin Grogan
The North Munster Project - Vol. 2: The prehistoric landscape of North Munster, by Dr Eoin Grogan.
Publications by members of staff in other outlets but relating to Discovery Programme projects are listed in Appendix 5.

Staff also continued to publish on aspects of their private research in various external outlets (see also Appendix 5), as well as lecturing at conferences in Ireland and abroad, and to local societies and student groups on behalf of the Discovery Programme and on their own work (Appendix 6). It should be noted that due to financial constraints it was necessary for members of staff to finance attendance at most of the conferences themselves, including, in most instances, those at which they were speaking on Discovery Programme projects.

Both major projects organized outreach events for local schools as well as the public during their fieldwork seasons and later in the year.

Our website at www.discoveryprogramme.ie, continued to be updated throughout the year with Discovery Programme news items. Recent technical innovations to the website now facilitate members of staff contributing items directly themselves.

The Discovery Programme had a major presence at the European Archaeological Association conference in Cork in late August. As well as a number of staff members giving papers, we mounted a small exhibition on our work, organised one of the seminars, assisted in the provision of technical facilities and contributed to one of the receptions.

Expenditure during 2005

A grant of €1,138,000 was made available by the Heritage Council for 2005, which combined with a small amount of finance from other sources created available funding at the beginning of the year of €1,144,000. In December the Heritage Council was able to make available an additional sum of €190,000, which was mainly used to make a number of purchases of pieces of equipment.

Staff Matters

- Staff and Directorate continued to meet informally over lunch on the days of the latter’s meetings.

- The process of transferring the support members of staff to the New Ireland pension scheme was completed during the year.
- The Staff Performance Appraisal system was continued during the year.
- The CEO’s 7 year contract came to an end during the year but was renewed by the Directorate following a formal assessment.
- Frequent staff meetings took place and the Partnership Committee also met during the year.
- The Benchmarking awards were paid on a forward-going basis from June in line with that paid to corresponding grades in the Civil Service, and in December it was decided by the Directorate that savings in funds for the year 2005 could be used to pay the ‘backpay’ element of that award.
- A number of innovations were also introduced in accordance with ‘family-friendly’ work practice policies.
GIS and Survey Section
The main aim of the GIS and survey section is to support and aid the objectives of the research projects, both in the field and office. Work continued at the two excavations, with tasks such as setting out trenches, 3D surface-modeling, and training excavation staff in total-station operation. Surveys were also required for the setting out of geophysics grids, photo-control for aerial surveys and the mapping of finds from field-walking. GIS tasks included database design and maintenance for the two excavations, and the creation of maps and illustrations for publication. The usual office support, advice and training in GIS and IT was provided to all staff. Besides these core tasks a number of significant developments also took place.

1. New IT/Survey Equipment
Towards the end of 2005 the survey and IT section was able to make additional equipment and hardware purchases as a result of extra funding from the Heritage Council. Along with computers and printers essential for the smooth running of the projects, four major items were bought which expand our range and capabilities, allowing us to become more self-sufficient.

AO Plotter
Posters for exhibitions and high quality large format maps and photographs can now be made in-house as a result of the purchase of an HP designjet 5500 plotter. Previously it had proved difficult to achieve cost-effective and consistent results by out-sourcing this work.

GPS Rover Unit
Technological advances in GPS allow the operation of roving units independent of a base station – corrections being obtained via a mobile phone service from the OSi. The result is a more efficient and flexible mode of operation, with less processing to obtain absolute positions in surveying. The Trimble 58000 receiver not only gives us this potential but can also operate with our existing equipment, allowing two rovers to work in the same location, doubling productivity.

Digital SLR Camera/Tabletop Studio
The Canon digital SLR camera (EOS 20D) with
Macro lens gives the ability to take high definition photography in-house. A tabletop studio allows lighting to be adjusted to give the desired illumination and shadow effects. Together this ensures we can control our image output to consistent and high standards.

**Terrestrial Laser Scanner**

As highlighted in our Annual Report 2003 we have been actively researching the potential use of this 3D survey technology over recent years. The Trimble/Mensi GS101 scanner now gives us the opportunity to implement this new technology in our field programme. It has enormous potential to improve the range and quality of our upstanding building surveys, and we intend to use it extensively on the Tulsk excavation to improve the speed and quality of recording.

As part of our training in the operation and processing of 3D laser scan data we undertook a survey of the facade of our office building at 34 Fitzwilliam Place.

**2. Roscommon Orthophoto Project**

Following on from the success at Mullaghfarna in 2004 (see Annual Report 2004) a new photogrammetric project was undertaken with the Medieval Rural Settlement Project at Tulsk, Co Roscommon. Stereo aerial photography was commissioned to cover an area of 70 km², including the Rathcroghan and Carns archaeological landscapes. Large format (23 x 23 cm) photographs were taken from a fixed wing aircraft at a height of 1148 m giving a photographic scale of 1:7500. The flight of 6 parallel runs resulted in 102 photographs (96 stereo models); these images were scanned to 21 microns. Strategically placed ground control was established using our differential GPS which achieves sub-centimetre accuracy. The processing software allows this control to be extended across the blocks of photography through a process known as aerial triangulation. A detailed digital terrain model (DEM) was automatically extracted from the stereo pairs, and used to orthorectify the images. In this process the distortions on the photos due to height displacement are removed, and geo-corrected images or orthophotos created. Those orthophoto images were cut into 1 km tiles, for use in GIS. The images are at very high resolution (0.16 m), i.e. each pixel on the image represents 16 cm on the ground.

At this resolution a large percentage of the relict landscape features are clearly visible, allowing the archaeologists to undertake a detailed analysis and classification of features before beginning any ground testing. In ArcGIS the orthophotos can be combined with other data sets for further analysis, and draped over the DEM to give 3D views of the landscape. To date, half of the orthophotos have been created, concentrating on the Carns and Rathcroghan areas. The project will be completed in 2006, when the control for the remaining sector is surveyed.

**3. COST A27 EU Framework Programme – Understanding pre-industrial structures in rural and mining landscapes**

The Discovery Programme was invited to participate in a European Cooperation in the field of Scientific and Technical Research (COST) Action. COST acts as an instrument in supporting co-operation amongst scientists and researchers across Europe and is supported by the EU Framework Programme. The action will run for four years.

The main objective of the Action is to identify and evaluate pre-industrial elements in the European landscape, threatened by the abandonment of traditional agricultural and mining activities. Two activity tasks within this objective have been identified:

- The intellectual examination of regional or local practices in the framework of broader historic processes.
The understanding of the evolution of the present-day landscape through a diachronic reading of the landscape.

Several secondary objectives have also been identified:

- Analysis of the morphological elements and models of integration in the landscape of today.
- Analysis of the technologies related to the historical use of landscapes.
- Diachronic study of specific legal and administrative practices.
- Analysis of landscape perception during history by the communities that inhabited and exploited them.
- Provide mechanisms for the public presentation of landscapes and the optimizing of Cultural Heritage.

Within the organisation of the Action, several different work groups are represented to enable landscape experts to network and bring together ideas for the development of theories and best practice. These include:

- Working Group 1: Mining landscapes.
- Working Group 2: Rural landscapes: landscape markers and the organisation of the land.
- Working Group 3: Virtual landscapes and databases.

It is envisaged that several publications will be produced during the course of the Action including:

- Representative rural landscapes: Selected examples of good practices in studying, protecting and giving value to European Landscapes.
- Managing and protecting landscape in Europe: A European synthesis on the protection of Pre-Industrial landmarks.
- Good practice in GIS/Landscape research in Europe.

4. In-house publication of Discovery Programme Reports 7

The GIS & Survey Department implemented a new process for all layout of the Discovery Programme Reports series. By using Adobe InDesign the team were able to construct a document that continues and improves on the established format of the existing volumes. Establishing this in-house facility allows for a two-fold benefit for the organisation:

- Full control of publication content and layout, including control of final image and illustration quality and format.
- Reduced overall publishing costs.

The success of this process will allow us to take more control and reduce the costs of future publications.

5. Offaly HLC Pilot

The Discovery Programme carried out a pilot project on behalf of Offaly County Council for the development and understanding of a Historic Landscape Characterisation Assessment (HLC A). Building upon work carried out as part of the EU funded Pathways to Cultural Landscapes, Dr Margaret Murphy and Anthony Corns produced a report which included:

- A discussion of the Landscape Character
- An analysis of cultural landscape variations
- The historical perspective of the development of land use
- The development of an improved HLC process for the county including a discussion of the tangible applications of the information for the Council and other interest groups.
Research continued in the Barrow Valley Project both at the desk and in the field. Two major databases have been developed: one dealing with the artefacts recorded from the nine counties within the wider River Barrow study area, the other with monuments recorded from within the watershed and the buffer zone outside it. The latter is based on the RMR and supplemented with notes from county inventories and other published sources, and with notes and descriptions made during fieldwork. The artefact database contains records of objects from the National Museum of Ireland, the Ulster Museum, and the British Museum, as well as other museums and published and unpublished sources, including those of the Irish Stone Axe Project. Mapping of both the artefacts and monuments has already indicated interesting patterns of activity within the valley from early prehistory up to the Iron Age.

Fieldwork was carried out in the valley from June to October of 2005, largely in fine dry weather. The major study areas were visited and the landscape and monuments of the valley were photographed. Preservation appeared to be relatively good, although some monuments proved difficult to locate and may have been removed since last recorded. Visiting the monuments allowed an idea of the connection between the monuments and their landscape to be built up, and gave a sense of the sort of spaces and viewpoints occupied by the monuments in relation to the river valley.

A geomorphological report was also carried out for the project by Dr Robbie Meehan. His study examined the soils and underlying geology of the valley, and looked at the likely vegetation cover and land use potential of various parts of the valley. Dr Meehan has looked at the specific study areas outlined in the 2004 annual report as areas of particular archaeological interest along the valley. It is hoped to develop some of the ideas in this report to explain some of the physical, practical and topographical reasons for choosing particular places for settlement or ritual activity. Dr Ingelise Stuijts hopes to develop some of the themes in the report, which will ultimately form the basis for a chapter on the prehistoric environment of the Barrow Valley.
Lake Settlement Project

Dr Christina Fredengren

During 2005 the Lake Settlement Project worked on five research modules. The main task was to prepare the report of the general Lough Kinale module (Kinale 1) for publication and to finish the excavation of the Mesolithic site at Derragh Island (Kinale 2 module). Work continued on the smaller Islands of the Dead and Lisnacrogher landscape modules. These are now almost ready for publication. Research in the Upper Shannon area will be resumed in 2006, the focus will be lake settlement in late prehistory. The Lake Settlement Project would like to express our gratitude to Prof. John Coles and Prof. John Waddell, members of our project committee, whose term on the directorate has come to an end and consequently their direct involvement in the Lake Settlement Project.

Kinale I

In our study of the Kinale area we have been working primarily with the archaeological remains, following the sites and monument distribution over time as well as analysing the artefacts from the area. The module also carried out small excavations on three crannogs, Ballywillin, T onymore and Derragh. However, the picture has been added to by the use of advanced environmental studies as well as the study of townland-names and the geomorphology of the area. Preparation of the resulting book is in its final stages. By the end of the year all the external referee reports had been received and work started on incorporating their comments. It is hoped that the book will go for publication before the end of 2006.

Kinale II – Derragh Island Excavation

In 2003, excavation began on what appears to have been a small man-made island measuring some 18 m in diameter, situated in the water-meadow at the mouth of the River Inny. The site consists of layers of stone, brushwood, peat, charcoal and hazelnuts and seems to be associated with spreads of lithics found in the late 1960’s. Currently this site is the only excavated Late Mesolithic wetland site with organic preservation in Ireland and Britain. It is one of a small number of similar in Western Europe with parallels in Scandinavia and Northern Germany where similar preservation and evidence for woodworking has been found.

A third and final season of excavation took place in the summer of 2005. Earlier years had produced evidence of a series of hearths, and a stake-row that could have been a part of a house-structure. In 2005 we sought to answer questions about this stake-structure and, therefore, carried out geophysical investigations and extended the trenches. So as not to put weight on the fragile remains, much of the excavation was conducted from raised planks – a painstaking process by a very patient team. The lithic material from the site is rich and well stratified and has the potential to answer a range of questions. Dr Farina Sternke from UCC is carrying out the initial lithics analysis.

Perhaps the most intriguing finds this year were the rows of worked stakes that formed both a linear and a circular arrangement. The stratification at the site is good but complex. Dominic Gallagher was responsible for planning on the site and also excavated many of its most intricate features. We investigated the areas outside the trenches through geophysics. Kjell Persson of Stockholm University conducted these investigations using a slingframe, and traced anomalies in line with the stake-structure. The excavation successfully traced the stake-rows into the new trenches and identified not only a rectangular feature but also a circular one. Within these there was evidence for a series of repeatedly used hearths.

The features are embedded in different types of peat and we had the good fortune to have Dr Nora Bermingham on the excavation crew. She was able to investigate these in context. A stratigraphical survey over and around the site was also undertaken and
has helped us to understand the site-formation as well as its environmental setting. Dr Nicki Whitehouse of QUB, and her students, are undertaking a study of the beetle remains. Dr Stuijts (see below) has started to prepare a pollen core from the site itself as well as from the nearby shoreline.

The challenging nature of wetlands archaeology, combined with a dense and complex Mesolithic/N eolithic stratigraphy required specialized skills of an experience team. The excavation team consisted Jean O'Dowd who registered finds, Claire Anderson and Mary Dillon excavating and recording the wood. Dominic Gallagher, had a special responsibility for site drawings and Mark Keegan, Killian Driscoll and Dag Hammar (lithics specialist) contributed with their wide knowledge to their site and Fiona Beglane gave us many insights into environmental sampling and osteology. This team dealing with a wetland site with a dense and complex stratigraphy all have a long experience in archaeological fieldwork and often many years on this particular site. We also had the opportunity to take on board a limited number of trainees for shorter time periods; these were Kourtney Donohue (UCC), Killian Driscoll (UCG), Martin Kelly (Belfast) as well as Anna Forss & Marie Lonnblad (Stockholm University). The excavation was directed by Christina Fredengren with Birgitta Larsson as co-director.

During the autumn the post-excavation work started. The team consisted of Jean O'Dowd responsible for the finds' book, Rebecca Boyd leading the digitizing of the plans, Claire Anderson investigating the worked wood and Dominic Gallagher pursuing issues of a stratigraphical and contextual nature. –

**Wood Samples - Claire Anderson**

Many wood samples were taken from the site at Derragh Island during the course of excavation. Due to the excellent preservation properties of peat, organic material such as wood survives particularly well. This has presented the Lake Settlement Project with a unique opportunity to expand our knowledge of people's relationship with the wooded environment of central Ireland in the late Mesolithic. It has been possible to explore not only the methods and type of woodworking from this period, but also how people related to wood in all its forms. Wood was collected and laid down at the site to form a habitable platform in this wetlands area, but it was also worked in particular ways to form tools and other useful implements.

A number of interesting wooden artefacts have turned up during post-excavation of the wood assemblage. There are two oak planks from lower levels which may provide very early dendrochronology dates for the Irish record. There is also a possible Mesolithic spear from the western edges of the platform, and a group of pine lights or tapers from various layers. These pine lights add greatly to the story of people's lives in this wetlands environment, as they may have been used in fishing or in transporting light across the landscape. The worked wood from Kinale also includes a number of brushwoods with stone-axe marks, and may be the earliest such examples of woodworking in Ireland. Further investigation is continuing into all of the worked wood assemblage.

**Islands of the Dead**

Human bones have been found on crannogs such as Lagore, Ballinderry 1 & 2, Rathinaun, and many others. Finds of human remains from lakes and rivers also require study. ‘Islands of the Dead’ is a cameo project designed to analyse this material from such water-related contexts throughout the whole of Ireland. A large number of bones have been dated by radiocarbon, and a clear pattern in their distribution over time has been determined. During 2005, some
Additional skulls were analysed and sampled for dating, and it is hoped that this material will be ready for publication before the end of 2006.

Lisnacrogher
Lisnacrogher, Co. Antrim is one of the key wetland sites of the Irish Iron Age, because of the well-known hoard containing a set of ornamented scabbards that was found there in the 19th century. However, the find-site was not properly documented and it was not known if the hoard came from a lake settlement or was just a bog deposition. Recent development work at the site facilitated its reinvestigation, to try to answer some of these questions. The text is now almost ready for publication.

International Co-operation
The Swedish Heritage authorities, Riksantikvarieämbetet and Statens Historiska Museet commissioned an investigation into the needs and possibilities to form an institute to research cultural heritage in Sweden, similar to the Discovery Programme. The commission is lead by Prof. Kristian Kristiansen and the said institute is to initiate new research within strategic themes on the area of cultural heritage and to build bridges between academic and practicing fields to play a role in the current social development of the country. Dr Christina Fredengren accounted for the activities and management structure of the Discovery Programme which is pointed to as an example in the publication of the investigation (see www.kulturarv.org) in a report published at the end of 2005/beginning of 2006.

Outreach
The Project has formed close links with local groups and communities in the Lough Kinale area. Staff members have made several presentations to these about the general archaeology of the area and the site. This interaction continued in 2005. An Open Day on 27 August was very well attended. Site tours took place, with the archaeologists explaining the ‘whys and hows’ of the excavation. Dag Hammar demonstrated the art of flint-knapping, and members of the public were invited to have a go. Children were asked to draw their impressions of the site and the Mesolithic way of life.

We also continued our interaction with local schools, hosting visits throughout the excavation season. Special thanks go to PJ. Reilly for all his help and support throughout the years.

Child’s interpretation of Mesolithic life.
Introduction
2005 was a busy year for the project. Progress was achieved on all three modules, and the publication of Discovery Programme Reports 7 represented an important milestone. In presenting public lectures at home and abroad, and publishing in a variety of journals and magazines, the project team has been able to maintain a high profile. During the year Niall Brady also became a Council member of the Society for Medieval Archaeology and a member of the Royal Irish Academy’s Working Group on the Humanities and Social Sciences. Brian Shanahan became a member of the Committee of the Group for the Study of Irish Historic Settlement. Michael Potterton became a board member of the European Association of Archaeologists and editor of TEA: the European Archaeologist newsletter. He also became a member of the editorial committee of the Journal of Irish Archaeology and a Council member of the Royal Society of Antiquaries of Ireland.

Anne Booker and Judith Ellen Gilmore of TCD deserve special mention for working voluntarily on the post-excavation tasks. Mr. John Tiernan, Roscommon County Manager, Nollaig McKeon (Roscommon Heritage Officer), Carolyn Candish and staff at the Cruachan Aí Heritage Centre, Tulsk, Co. Roscommon, has each provided much support for the excavation at Tulsk. We wish especially to acknowledge the generous grant of Roscommon County Council for the publication of DPR 7. Prof. Terry Barry (TCD), Dr Johnny De Meulemeester (Heritage Department of the Walloon Region, Belgium) and Dr Kieran O’Connor (NUI Galway) have continued to send students to work on the Tulsk excavation. We would also like to acknowledge the volunteers from other universities and institutions in Ireland, other parts of Europe and North America, who have participated in the excavation. Dr Paul Gibson and Dot George, Department of Geography, National University of Ireland Maynooth, have conducted another series of geophysical surveys at Tulsk and also at Castlemore, Co. Carlow, while Mr. and Mrs. Hosey, Castlemore, Co. Carlow, continue to support the survey work on their lands, which is part of the Southeast module. Loreto Guinan, Heritage Officer, Meath County Council, and the Cruicetown Cemetery Committee, provided generous support for a study of the church and graveyard at Cruicetown, Co. Meath.

The year brought the employment of Anne Connon and Dr Margaret Murphy on the main historical analyses associated with the project to an end. The contribution of each to the Project has been vital. It is clear that integration of documentary sources with the archaeological data is at the core of any successful investigation of the medieval period in Ireland, and we have been privileged to have both scholars on the team.
Dublin Module

Dr Margaret Murphy and Dr Michael Potterton

The principal aim of this module is to reconstruct a picture of rural settlement, land-ownership, land-use and farming practices within the region that surrounded Dublin, the medieval capital of Ireland. 2005 saw the completion in draft form of the first four fifths of the monograph, which will be the main publication of this module. Sections 1-3 are currently being reviewed by the Project’s Steering Committee. Section 1 (Introduction) presents the chronological and spatial parameters of the study, discusses the national and international contexts within which the research is placed and describes the archaeological and historical data. This is followed by Section 2 (Settlement and society), which deals with the primary division of land ownership in the area between the crown, the church and various lay lords, and explores settlement hierarchies through analysis of monument distributions and sources for manorial and borough society. Section 3 (Exploitation of land and water) considers how the resources of the region were managed and exploited to produce food, fuel and raw materials. Section 4 (Processing and distribution) bridges the gap between production and consumption by looking at how raw materials were turned into finished products and how these products were distributed within the region. Section 5 (Conclusions and review) will reflect on the nature of the combined archaeological/historical resource that has helped to generate this volume and will consider where later medieval rural settlement studies should be positioned over the next decade or so. The entire monograph is on course for completion to publication standard before the end of 2006.

Roscommon Module

Anne Connón, Rory McNeary and Brian Shanahan

A detail from the first folio of the Uí Briúin generalogies in the Book of Ballymote (BB 54a)

The Roscommon module is investigating the nature of settlement and land use within a Gaelic lordship, that is, it is concerned with examining the evidence for rural life in a region that was not under the direct control of the Crown or the king’s barons during the formative period of the 12th to early 16th centuries. In 2005, Anne Connón completed research for the historical component of the module. In 2004, her work had focused on extracting the pertinent information from a range of vernacular Gaelic sources covering the period 1100 to 1650 AD. These included annals, genealogies, saga literature, bardic poetry, and saints’ lives. In 2005, Anne’s focus switched to Latin and vernacular English sources, the
majority of them dating to the 16th and 17th centuries, although some dated back as far as the 14th century. These non-Gaelic sources included papal letters and taxation records, Episcopal visitations, Tudor fiants, inquisitions, calendars of patent rolls, and land-ownership records from the Cromwellian confiscations. Approximately half of the Latin and English sources were available in printed texts; the other half, in manuscript, necessitated research trips to the British Library and the UK National Archives, as well as to archives closer to home in TCD, the National Archives, the Royal Irish Academy, and the O’Conor archives at Clononis House, Co. Roscommon.

With the primary and secondary research complete, Anne concentrated on mapping and writing up the assembled data, as a study of land-ownership within the O’Conor lordship. Key themes of the study include: topographical influence on land division; the relationship between family ties, land ownership, and the concept of baile (English ‘bally’); patterns of land distribution; monastic and church-holdings, as well as holdings of other speciality groups such as the learned and gallowglass families; the relationship of parishes and political units; and the question of proto-towns in this Gaelic lordship.

Brian Shanahan and Rory McNeary concentrated on mapping relict landscape features, principally field boundaries and deserted settlements. Fieldwork was initiated at selected sites in North Roscommon to ascertain their potential for more in-depth analysis. They were assessed in terms of preservation and potential for medieval settlement horizons. In turn, this work highlighted the need for an accurate and comprehensive survey of these relict features. We commissioned BKS Surveys Ltd to conduct an aerial survey covering the core study area around Rathcroghan and Carnfree. This area is characterised by extensive relict earthworks, covering a broad spectrum of functions and chronologies. Anthony Corns and Rob Shaw provided ground control and post-flight data processing. The study is made up of orthophotos divided into four quadrants, and the data is being digitised in a GIS environment. A methodology was developed to digitise relict land use elements such as relict field boundaries and discrete settlement features such as moated sites, ringforts and house sites. The team has also begun to address additional features such as modern boundaries and land-use. The aim is to produce plots, accurate to Irish National Grid, accompanied by detailed chronologies of settlement and land use. This may be subject to further spatial analysis using ArcMAP software. This work is progressing in conjunction with Anne Connon’s work on historic landholding.

Preliminary results were presented at the COST conference, Naples (European Cooperation in the Field of Scientific and Technical Research) and a general overview was published in the Journal of the Roscommon Archaeological and Historical Society (2006).

It was decided that a general study of the chronology of settlement and enclosure should be complemented by micro-studies. Carns townland has
been chosen, initially for the latter because it is particularly rich in relict earthworks, including prehistoric burial sites, ringforts, a moated site, deserted settlements and a field system. It was also the site of the inauguration of the O’Conor kings in the later middle ages. The aerial photographs have been studied in conjunction with historic maps and historical sources from the Middle Ages to the nineteenth century. This micro-study has begun to inform the wider landscape study. It is intended to continue work at Carns using geophysical survey, environmental sampling and focused excavation in 2006. This is aimed at establishing a more detailed understanding of the relationship between the postulated medieval field system and the deserted settlements located within it. Work on land-use will combine environmental sampling with further fieldwork aimed at explaining the function of the fields based on their morphology, local topography and access to resources.

Tulsk Excavation

Dr Niall Brady

Excavation at Tulsk was conducted over a ten-week period between June and August 2005. In addition to the core staff, a number of volunteers from Ireland and abroad also worked with us. The aim was to achieve additional insight into the stratigraphical sequencing of the features on the main mound. The 24m by 6m cutting opened in 2004 was extended 55m in length, to reach across the mound and extend beyond the fosse on the east side. A smaller cutting was opened along the northeast slope to trace the extent of the stone tower in that area. The recovery of a ring-pin brooch of the 10th/11th century supports the contention that ‘invisible’ levels of that period will probably emerge in time. The excavation is exposing two significant later phases of occupation, both of which give an insight to life in Gaelic Ireland during the later Middle Ages. At the upper level there is an assemblage of small finds and
associated structures dating to the late 16th century. The dominance of musket balls and traces of activities associated with shot-making and gun-cleaning, and the presence of predominantly English coins and a dice supports the possibility that a party of Crown soldiers occupied the mound in the late 1500s. In 1582 English soldiers established themselves in Tulsk. In 1593, at the start of the Nine Year’s War, the Queen’s Governor in Connacht, Sir Richard Bingham, was camped at Tulsk. He is credited with carrying out repairs at the priory in 1595 as well as building a fortification to protect a small English garrison. Tulsk was also recorded as one of only a few English garrisons to hold out against the Irish in 1598.

In 2004, the excavations revealed a sangar, or temporary look-out post constructed from loose stone, on the northern perimeter of the mound. However in 2005, the remains of far more substantial buildings were revealed, along with the associated assemblage of militaria. Far from being a simple look-out facility, the mound appears to have had a long-term role in the garrisoning of Tulsk.

The excavation is demonstrating a still more central, earlier role for the site. Excavation of the anomalies indicated by geophysics in the eastern half of the mound revealed the remains of a rectangular building, measuring c. 20m long by 10m wide. The external wall is c.3m thick, and retains a battered or sloping profile along its base, with a recessed garderobe, or latrine chute. The internal walls are somewhat lighter in construction and suggest multi-period use. These features are typical of small tower-house castles. It appears that this castle was in ruins by the time of the Elizabethan reoccupation, as several stones from the tower are reused in the 16th century structures. The tower at Tulsk occupied one side of the mound, while the adjacent area appears to have been without substantial buildings. This area probably formed a bawn or enclosed precinct.

There are references to the construction of a castle at Tulsk in 1406, which is believed to have been built for O’Conor Roe following the division of the O’Conor lordship into two factions in 1385. The English-built castles at Roscommon and Ballintober, became strongholds of the O’Conor Don at the time of the so-called ‘Gaelic revival’ in the late 14th century. The castle in Tulsk was destroyed in 1407 but was later rebuilt. The location of the castle in Tulsk has been
traditionally thought of as being in the adjoining field, west of the Ogulla River in the aptly named Castleland townland. A grassy knoll there conceals a substantial core of collapsed masonry. However, the nature of the substantial masonry remains currently being excavated raises questions about this traditional view. These excavations have revealed a far more complex site than was initially thought likely.

**Southeast Module**

Dr Niall Brady and Dr Margaret Murphy

This module examines a particular location in detail – Castlemore, Co. Carlow. This was the centre of the manor of Forth, held by the Bigod family in the 13th and 14th centuries. The exciting fieldwalking data retrieved in 2004 was complemented by additional fieldwalking in 2005, along with a series of geophysical surveys. A considerable body of information has been generated, both from documentary and archaeological sources. In 2006, this data, which is extraordinarily rich in an Irish context, will be investigated in further detail.

**Outreach**

An open day for the local community was held at the site of the Tulsk excavation on 28 July. A series of guided tours and displays was organized in association
with the Cruachan Aí centre. The events of the day culminated in a launch ceremony for Discovery Programme Reports 7 which was attended by many local dignitaries, especially the Mayor of Roscommon, Cllr Seán Beirne.

A heavy workload in September meant that no event could be scheduled as part of Heritage Week. Instead an event at the Cruachan Aí centre at Tulsk was organized on 7 October. A series of talks and guided tours were given to children from north Roscommon. Schools involved included: Enfield, Frenchpark, Ballintubber and Ballinagare. Subjects covered: Irish archaeology; the everyday work of archaeologists; and the MRS project, particularly the on-going excavation at Tulsk. We would like to thank all the teachers involved.

Plan of Castlemore, Co. Carlow, combining the results of the field-walking and geophysical surveys conducted there, revealing the essential presence of a deserted medieval street village.
Niall Brady conducting a guided tour of Tulsk mound during the Open Day on site in July.

Brian Shanahan and Rory McNeary with a school group during a site tour of Tulsk Priory in Heritage Week.
Environmental Work

Dr Ingelise Stuijts

This year the environmentalist who had previously been assigned only to the Lake Settlement Project began operating on a Company-wide basis, i.e. for all the projects. The work was focused on the three current research projects, however, the priority was still the environmental material from the Lake Settlement Project. Active involvement in the other projects was at a limited level.

Overview

Most microscopic work in 2005 involved identification and measurements of wood and charcoal remains collected in 2003 and 2004 by the Lake Settlement Project.

A Woodworking in Antiquity course, given by Damien Goodburn in London was attended in April. This gave a hands-on introduction to prehistoric and medieval tools and the toolmarks they leave behind.

In the absence of laboratory and microscopic facilities within the Discovery Programme, an arrangement was made with Dr Frasier Mitchell and Prof. Peter Coxon of TCD. This will allow access for the environmentalist to the laboratory facilities at TCD for the preparation of pollen samples. The environmentalist will become an ‘associate’ of TCD during the course of this arrangement.

River Barrow project

The environmentalist joined part of a reconnaissance field-trip with the project director, Dr Annaba Kilfeather, and Dr Robbie Meehan, geomorphologist. The geology of the overall area as well as the soil quality of a few distinct areas was studied. This is a challenging project because it is at such a large scale. It is often at a micro-level that important environmental signals are noted. It is anticipated that environmental input could be of more relevance at a later micro-level stage. At this stage there is a lacuna in the environmental research for the area.

The Medieval Rural Settlement Project

The excavation site at Tuls was visited on three occasions during the fieldwork season. Tuls is a dry-land site with limited possibilities for environmental work, except for the charred remains.

A programme of retrieval of soil samples from specific archaeological contexts with charred remains was undertaken, as well as the recovery of charcoal patches when identified in the field. This material has yet to be sieved and sorted prior to identification. Also a small wetland area was identified adjacent to the site. Initial coring showed the presence of wood peat close to the surface. More work is required to identify a suitable site for the extraction of a monolith for study. This should help to tell us about the conditions immediately surrounding the excavation site, the adjacent landscape, and the relevant land usage in medieval times. A test monolith taken at the site in 2005 will show how well material has been preserved as well as the range of organic matters present.

Lake Settlement project

Further excavations at Derragh Island yielded extensive environmental material during 2005. The quality of the waterlogged deposits is excellent with potential for the recovery of a wide variety of materials and information. The environmentalist was present during the excavation for two separate weeks and focused especially on stratigraphic work in the fen peat area on the landfall side of Derragh Island. A systematic augering programme was carried out in 2005 by Nora Bermingham. This important stratigraphic work is a powerful research tool, as was shown by the work on the Lough Kinale module by the University of Exeter team. By making a transect over the area to be investigated in the form of a
cross, and coring at fixed intervals - usually around 30 metres - the separate stratigraphical layers under the ground are identified. This makes it possible to reconstruct the former environmental dynamics in the area.

The environmentalist identified all individual wood lumps found in the auger sections. These showed that the whole basin adjacent to the site was covered at least part of the time with an alder carr with willow. No other tree species were found except some birch and oak roots. Derragh Island itself, however, had a variety of species besides alder and willow; these included elm, oak and hazel. Another aspect of this year’s fieldwork was the testing, along with Dr Robbie Meehan, of the so-called esker ridge that almost divides Lough Kinale into two parts. Surprisingly, this turned out to be a peat ridge, formed upon a bench of marl stretching into the lake. The ridge is covered with a low tree cover of branching willow with some alder trees at the sides.

Other low trees include guelder rose and some ash. The bench is about 80 m long and 20 m wide and surprisingly easy and comfortable to walk over.

This area is divided from the mainland by a stretch of wet bog that probably formed a filled-in former channel. Wood from tree stumps left on the surface on the dry-land side of the channel was analyzed. These were the remains of large oaks. The area between the ridge and the dry land is filled in with peat and has an irregular basin. Some more work on this ridge, to precisely identify the relationship with the dry-land, will be needed.

By arrangement with Dr Fraser Mitchell of TCD two post-doctoral students, Dr Bettina Stefanini and Dr Pirita Oksanen, with coring equipment, visited the excavation on 14 September, to obtain material from undisturbed layers close to the site.

A range of studies will be possible on this material. Depending on funding and time this will be carried out during 2006. Also, on 15 September, Dr Nicki Whitehouse and Dr Chris Hunt from Queen’s University Belfast visited the site to sample material for beetle studies. A group of students from QUB, who will be working this material, visited the site on 7 October. Dr Robbie Meehan, Prof. Martin Downes NUI, Maynooth joined the group on that day and took part in the field-work.

It is clear that a very large amount of environmental material is being generated by this excavation (wood, charcoal, monolith samples, the peat ridge and auger samples) and it will be necessary to make choices for study between them during 2006, depending on resources.
Appendix One

Discovery Programme Directorate (Board of Directors) 2001-2006

Dr Michael Ryan  
(Chairman)  
Appointed by the Heritage Council with the approval of the Minister for Arts, Heritage, Gaeltacht and the Islands (responsibility now transferred to the Minister of Environment, Heritage, and Local Government)

Prof. Terence Barry  
Discovery Programme Council appointee

Ms Rose Cleary  
Heritage Council appointee

Prof. John Coles  
Discovery Programme Council appointee

Ms Margaret Gowen  
Heritage Council appointee

Mr Raghnall Ó Floinn  
Discovery Programme Council appointee

Prof. Barry Raftery  
Discovery Programme Council appointee

Mr Michael Starrett  
Heritage Council appointee

Prof. John Waddell  
Discovery Programme Council appointee

Michael Ryan  
Terry Barry  
Rose Cleary  
John Coles  
Margaret Gowen  
Raghnall Ó Floinn  
Barry Raftery  
Michael Starrett  
John Waddell
### Members of the Council of the Discovery Programme 2004-2008

<table>
<thead>
<tr>
<th>Council members</th>
<th>Nominating bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Michael Ryan</td>
<td>Chairman of Directorate (from January 2001)</td>
</tr>
<tr>
<td>Ms Mary Cahill</td>
<td>National Museum of Ireland</td>
</tr>
<tr>
<td>Mr Christiaan Corlett</td>
<td>Institute of Archaeologists of Ireland</td>
</tr>
<tr>
<td>Ms Claire Foley</td>
<td>DOENI</td>
</tr>
<tr>
<td>Dr Annaba Kilfeather</td>
<td>Discovery Programme staff</td>
</tr>
<tr>
<td>Dr Finbar McCormick</td>
<td>Queens University Belfast</td>
</tr>
<tr>
<td>Mr Roger Mercer</td>
<td>Overseas Member (Scotland) (from June 2004)</td>
</tr>
<tr>
<td>Mr Fionnbarr Moore</td>
<td>DOEHLG</td>
</tr>
<tr>
<td>Mr Conor Newman</td>
<td>National University of Ireland Galway</td>
</tr>
<tr>
<td>Dr Kieran O’Conor</td>
<td>Royal Society of Antiquaries of Ireland</td>
</tr>
<tr>
<td>Dr Joanna Brück</td>
<td>University College Dublin</td>
</tr>
<tr>
<td>Dr Elizabeth Shee Twohig</td>
<td>University College Cork</td>
</tr>
<tr>
<td>Mr David Sweetman</td>
<td>Royal Irish Academy</td>
</tr>
<tr>
<td>Mr Richard Warner</td>
<td>Ulster Museum</td>
</tr>
</tbody>
</table>
During 2005, the Directorate met in separate session six times.

**Meetings of Directorate:**

15 February
12 April
7 June
26 July
11 October
13 December

**Meeting of Council:**

12 April & 22 November

**Joint meetings of Council and Directorate**

25 July (meetings associated with field trip)

**Annual General Meeting**

11 October

**Audit Committee Meetings**

25 April
7 June
13 December

In addition, there were a number of meetings of committees and groups of directors and staff, relating to project matters and other specific issues.
The following were members of staff of the Discovery Programme during 2004

Dr Brian Lacey  Chief Executive Officer
Ms Kathleen O’Sullivan  Company Administrator
Ms Aoife Kane  Administrative Assistant

Mr Anthony Corns  GIS/IT Manager
Mr Robert Shaw  Geo-surveyor
Dr Ingelise Stuijts  Environmentalist

Dr Annaba Kilfeather  BVP Project Director

Dr Christina Fredengren  LSP Project Director
Ms Birgitta Larsson  LSP Senior Research Archaeologist
Ms Claire Anderson  LSP Research Archaeologist
Ms Rebecca Boyd  LSP Research Archaeologist
Mr Dominic Gallagher  LSP Research Archaeologist
Ms Jean O’Dowd  LSP Research Archaeologist

Dr Niall Brady  MRS Project Director
Mr Brian Shanahan  MRS Assistant Project Director
Dr Michael Potterton  MRS Senior Research Archaeologist
Mr Rory McNeary  MRS Research Archaeologist
Dr Margaret Murphy  MRS Project Historian (Anglo-Norman sources)
Ms Anne Connon  MRS Project Historian (Gaelic sources)
Appendix Five

Publications by members of staff or former members of staff relating to Discovery Programme projects

Edel Bhreathnach (ed.) Tara: Kingship and Landscape, Four Courts Press, Dublin.


Eoin Grogan The North Munster Project - Vol. 1: The later prehistoric landscape of south-east Clare, Wordwell, Bray.


Rory McNeary and Brian Shanahan, ‘Medieval settlement, society and land use in the Roscommon area: an introduction’ in Discovery Programme Reports 7 (2005), 3-22.


Publications by members of staff not relating to Discovery Programme projects


Brian Lacey is the editor of the Journal of the Royal Society of Antiquaries of Ireland. Vol. 133, for 2003 was published in December 2005.

Christina Fredengren ‘Crannogs’ in Archaeological Inventory of County Sigglo Vol. 1, Dublin.


Michael Potterton is editor of the on-line newsletter TEA: The European Archaeologist. Issues 23 (May) and 24 (December) appeared in 2005.

Michael Potterton, Medieval Trim: history and archaeology (Dublin, 2005), 464pp.

Lectures and presentations given by members of staff in 2005


Niall Brady, 5 May 2005. ‘Settlement and Land use in the region around Dublin’. At the 40th International Congress on Medieval Studies, Kalamazoo, USA.

Niall Brady, 18 June 2005. ‘Agricultural History Studies in Medieval Ireland: where to now?’ At the Agricultural History Society Summer Meeting, Castlebar.


Niall Brady, 6 September 2005. ‘Excavating at Tulsk 2004-5’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.


Niall Brady and Margaret Murphy, 17 November 2005. ‘Land use and agrarian practice in southwest Dublin-north Kildare’. At the Agricultural History Society Autumn Meeting, Manor Farm and Demesne Farm, Maynooth.


Anne Connon, 10 April 2005. ‘The Queens of Tara in Legend and in History’. At the Celtic Society, National University of Ireland, Maynooth.


Anthony Corns, 22 March, The Use of Digital Photogrammetry in three dimensional recording of archaeological Landscapes’ Computer Applications in Archaeology (CAA) conference, Tomar, Portugal.


Anthony Corns, Robert Shaw, 6 September, ‘Survey and GIS at The Discovery Programme’ British association for the Advancement of Science Festival of Science, Trinity College Dublin.

Anthony Corns, Robert Shaw, 28 September, ‘GPS surveying and 3D modelling applications in Archaeology’, lecture and field demonstration day, MA Landscape Archaeology students, School of Archaeology, UCD.

Anthony Corns, Robert Shaw, 5 November, ‘The Use of Digital Photogrammetry in three dimensional recording of archaeological Landscapes’ EU Cost A27 meeting, Università degli Studi di Napoli Federico II, Naples, Italy.

Christina Fredengren, 27 August ‘The Derragh Island excavations’, public lecture on site.

Christina Fredengren, 27 August ‘The Derragh Island excavations’, guided tour on site as part of Meso 2005 Conference, Belfast.


Christina Fredengren & Birgitta Larsson 29 May, ‘The Discovery Programme Lake Settlement Project’, Department of Archaeology, Stockholm University, Stockholm.

Brian Lacey 27 Jan. ‘The origins of Cenél Conaill: archaeology, geography, history and mythology’, Royal Society of Antiquaries of Ireland.

Brian Lacey 9 June, ‘Colum Cille and the Cenél Conaill’, Gael Arus, Derry.

Brian Lacey 10 June, bilingual (English/Irish) guided tour of Columbán and Cenél Conaill sites in the east and northwest of Co. Donegal on behalf of Conrádha na Gaeilge, Derry.

Brian Lacey 16 June, ‘From Niall Nóigíallach to the O’ Nells’, The Ó Néill Summer School, Randalstown, Co Antrim.


Brian Lacey also chaired sessions at the ‘Death and Burial in Early Christian Ireland’ (Royal Society of Antiquaries of Ireland), Aerial photography in Irish archaeology (Heritage Council at the Chester Beatty Library), ‘Lives and Afterlives: St Brigid’ (at the Micheál Ó Cléirigh Institute/Irish Humanities Institute, UCD) ‘The March in The Medieval West 1000-1500’ (at the Micheál Ó Cléirigh Institute/Irish Humanities Institute, UCD) seminars, and at the Irish Conference of Medievalists (Kilkenny).


Rory McNeary, 6 September 2005: ‘Underwater archaeology in Ireland: excavation, conservation and preservation’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.

Rory McNeary, 16 February 2005: ‘An examination of the evidence for the later medieval usage of crannógs in Fermanagh’. Postgraduate seminar, Department of Medieval History, Trinity College Dublin.


Rory McNeary, 25 June 2005: ‘“Guns, Harpoons, Lances, Casks and every [necessary] article”: An account of the history and archaeology of an eighteenth-century shore-based whaling and basking shark fishery in Donegal Bay’. At Ireland and the Atlantic: Intercultural Contact and Conflict (The Canadian Association for Irish Studies (CAIS) Annual Conference), National University of Ireland, Maynooth.

Margaret Murphy, 23 February 2005. ‘Land-ownership and land-use in the medieval Rathdown area - re-appraising the historical sources’. At a conference on Recent Archaeological Discoveries in Dun Laoghaire-Rathdown, Town Hall, Dáky.

Margaret Murphy, 20 June & 4 August 2005 ‘The use of documentary sources in medieval settlement studies’ at the DP/MRSP Summer Programme for archaeological students, Castlerea, Co Roscommon.

Margaret Murphy, 6 September 2005. ‘Is archaeology all rubbish? Reconstructing diet from medieval waste’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.

Margaret Murphy 15 September 2005. ‘The key of the county. Saggart and the manorial economy of the Dublin March’ at the conference entitled ‘The March in the Medieval West’, organised by the Micheál Ó Cléirigh Institute, UCD.

Margaret Murphy and Michael Potterton, 12 November 2005: ‘Feeding the city: reconstructing diet, lifestyle and health in medieval Dublin’. At the Archaeology Ireland conference on ‘Food, culture and identity’, University College Dublin.


Michael Potterton, 6 April 2005: ‘All creatures great and small: the animals of medieval Trim’. At the AGM of the Meath Archaeological and Historical Society.


Michael Potterton, 20 May 2005: ‘Current research on Medieval Rural Settlement in the Dublin Region’. At the Postgraduate Seminar, School of Archaeology and Palaeo-ecology, Queen’s University Belfast.

Michael Potterton, 6 September 2005: ‘Talking heads: learning from dead bodies’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.


Brian Shanahan and Rory McNeary, 2 September 2005: Led archaeological fieldtrip to County Roscommon. For the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.


Brian Shanahan, 6 September 2005: Aerial Photography and Landscape studies’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin.


Robert Shaw, 1 February. Archaeological survey and 3D modelling applications’ Dept. of archaeology students, NUI Galway (visiting The Discovery Programme).


Ingelise Stuijts with Caíthrina Moore, 7 May 2005: ‘The artefacts seen from an environmental perspective’. At The Environment and Archaeology seminar, The Archaeology Company, Oxmantown Hall, Birr.


Ingelise Stuijts, 6 September 2005: ‘The wonderful life of an environmentalist: dead bodies, muck, mud, moss and other crap’. At the British Association for the Advancement of Science annual Festival of Science, Trinity College Dublin


Ingelise Stuijts, 7 October 2005: Fieldtrip to Lough Kinale and presentation for students from Queen’s University Belfast.


Ingelise Stuijts, 12 November 2005: ‘Environment(al) matters in Lough Kinale, Co. Longford’. Lecture at Queen’s University Belfast.
Conferences/Sessions/Seminars organized on behalf of the Discovery Programme in 2005


Michael Potterton (with Thomas Herron), 8 April 2005: Ireland in the Renaissance. Four panels presenting on a range of topics at the Renaissance Society of America’s annual conference, Cambridge, England [20 speakers]

Michael Potterton (with Christiaan Corlett), 15 April 2005: Medieval rural settlement in Ireland, in light of recent excavations. At the Helen Roe Theatre, Royal Society of Antiquaries of Ireland, Dublin [17 speakers]

Michael Potterton (with Christiaan Corlett), 14 October 2005: Death and burial in Early Christian Ireland, in light of recent excavations. At the Helen Roe Theatre, Royal Society of Antiquaries of Ireland, Dublin [20 speakers]
Chairman, thank you for the invitation to address your committee as CEO of the Discovery Programme. The Discovery Programme is a public institution for advanced research into Irish archaeology.

Institutional history of the Discovery Programme
We were established in May 1991 as a non-statutory body on the personal initiative of Taoiseach Charles J. Haughey. In 1993 responsibility was transferred to the Department of Arts, Culture and the Gaeltacht. In 1996, under Minister Michael D. Higgins, we became an autonomous Company - the Discovery Programme Ltd - to be funded through the Heritage Council. We now operate completely under the aegis of the Heritage Council, as confirmed to the Dáil by Minister Síle de Valera on 21 February 2001.

Governance
We are audited by the C&AG and, in accordance with a Memorandum of Understanding of 1998, a small number of administrative matters still require the approval of the Department. Otherwise we are an independent body. We have a Council, representing twelve archaeological institutions north and south - universities, museums, government departments, learned and professional societies, etc. This group can, additionally, co-opt up to four distinguished archaeologists from abroad. That Council appoints five members of a Directorate/Board of Directors. Three other members are appointed by the Heritage Council, as is the Chairman, who must be approved by the Minister for heritage matters. The Heritage Council has decided that one of its appointees will always be its Chief Executive. Unfortunately our current Chairman, Dr Michael Ryan, cannot be here today but is very willing to speak to the committee on another occasion if that would be useful.

Remit
As distinct from the other public bodies that deal with Irish archaeology, the Discovery Programme’s sole remit is to engage in full-time archaeological and related research, in order to enhance our knowledge of Ireland’s past. Our only other concern is to communicate the results of that research, as appropriate, to scholars and the public.

Work
We do our work by identifying major issues about which there is a lack of knowledge and establishing research projects to investigate those matters. A dedicated specialist staff is recruited for each project. To date six major projects have been established as well as some smaller ones, covering many parts of Ireland. The results have been published in six books and six issues of an in-house scientific journal. Several other ancillary educational and popular publications have been issued, and the staff has written over two hundred other articles in various external outlets. At this moment, four more books are at the publishers, three books are in various stages of drafting, others are in preparation, and the seventh issue of the in-house journal will be published later this year.

Tara
Since our inception we have had a Tara Project, investigating both the archaeological remains as well as the literary and historical sources. Three of our books and many of our research reports have dealt specifically with Tara, and a major study dealing with the kingship of Tara in the period AD 400 to 800 will be published later this year. I think we can claim that we have done more research on Tara than everyone else put together. Our work on Tara has included all forms of survey, excavation, and study of the ancient and modern historical sources for the site and its hinterland. One example of the results of this work is that, before we started, only about thirty individual monuments were known on the Hill and there was, effectively, no understanding of their chronological relationship. The number of known sites on the Hill now stands at about one hundred and twenty and we have an overall model of their development through time, which can be tested by excavation in the years to come. In addition, there has been a growing appreciation that the Hill of Tara itself is just the dominant element of a wider surrounding landscape of related ritual and settlement sites, which seems to extend from Ringlestown Rath to the west, along the Riverstown linear earthwork to Rathmiles to the north, and onwards to Rath Lugh and Skreen to the east.

The M3
The Discovery Programme is a research institution and has no function in planning or development matters; it is
certainly not a campaigning body. Nevertheless, given our major involvement with Tara, we felt that it was appropriate for us to make our views known at the motorway planning stage. The Discovery Programme involves individuals who, in their separate capacities, have taken differing positions and roles in relation to the M3 debate but, as a corporate body, we said, both in written objections and at the oral hearing, that we were against the route subsequently approved. However, once the decision on that matter had been made with due process, we believed that we had no further role and that it would be beyond our powers to engage in the controversy that subsequently emerged. Although both sides in that debate have frequently referred to us, we have scrupulously avoided any further public comment on the matter.

We would, however, wish to reiterate the following points:

1. It would be hard to overstate the national and international importance of Tara.
2. The Hill of Tara is only one element of a wider related archaeological landscape, the additional richness of which is continually being further revealed.
3. The Discovery Programme, of course, welcomes the development of our national infrastructure but is occasionally disappointed when, even in good faith, a major cultural asset is depleted by such development.
4. We would assert that, in the event of any impingement on such an extremely important asset, the very least that can be expected is that the highest possible standard of archaeological investigation and mitigation be deployed.

Dr Brian Lacey
Chief Executive Officer
The Discovery Programme

The CEO was subsequently questioned by the members of the committee for a further thirty minutes or so. This was followed by a statement from, and the questioning of, the Chief Executive of the Heritage Council. A full account of the proceedings can be found on the Oireachtas website.
## Discovery Programme
### Income & Expenditure Account

**for the year ended 31 December 2005**

<table>
<thead>
<tr>
<th>Notes</th>
<th>2005 €</th>
<th>2004 €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income – Heritage Council</td>
<td>1,573,748</td>
<td>1,187,000</td>
</tr>
<tr>
<td>Income – Heritage Council</td>
<td>-</td>
<td>82,123</td>
</tr>
<tr>
<td>Other Income</td>
<td>28,237</td>
<td>19,992</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>680</td>
<td>277</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>1,602,665</td>
<td>1,289,392</td>
</tr>
<tr>
<td>Transfer (to)/ from capital account</td>
<td>(120,310)</td>
<td>5,586</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>1,482,355</td>
<td>1,294,978</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
<th>2005 €</th>
<th>2004 €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>1,042,398</td>
<td>871,866</td>
</tr>
<tr>
<td>Interest and charges</td>
<td>250</td>
<td>510</td>
</tr>
<tr>
<td>Promotions and conferences</td>
<td>17,139</td>
<td>15,211</td>
</tr>
<tr>
<td>Office and accommodation</td>
<td>211,501</td>
<td>210,896</td>
</tr>
<tr>
<td>Consultancy</td>
<td>74,314</td>
<td>17,415</td>
</tr>
<tr>
<td>Photography</td>
<td>7,708</td>
<td>325</td>
</tr>
<tr>
<td>Training</td>
<td>-</td>
<td>350</td>
</tr>
<tr>
<td>Travelling and subsistence</td>
<td>53,283</td>
<td>29,324</td>
</tr>
<tr>
<td>Publications</td>
<td>204</td>
<td>73,661</td>
</tr>
<tr>
<td>Accountancy and professional fees</td>
<td>17,776</td>
<td>16,381</td>
</tr>
<tr>
<td>Auditors remuneration</td>
<td>4,100</td>
<td>2,500</td>
</tr>
<tr>
<td>Subscriptions</td>
<td>1,499</td>
<td>1,052</td>
</tr>
<tr>
<td>Depreciation</td>
<td>82,175</td>
<td>54,601</td>
</tr>
<tr>
<td>Fieldwork and excavation costs</td>
<td>17,665</td>
<td>16,468</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>(1,530,012)</td>
<td>(1,310,560)</td>
</tr>
</tbody>
</table>

(DEFICIT) FOR THE YEAR | (47,657) | (15,582) |
OPENING SURPLUS 1 JANUARY | 135,061 | 150,643 |
CLOSING SURPLUS 31 DECEMBER | 87,404 | 135,061 |

The financial statements were approved by the board of directors on 13 June 2006 and signed on its behalf by:

**Directors**
### Fixed Assets
- Tangible assets 8

### Current Assets
- Stocks 9
- Debtors
- Cash at bank and in hand

### Creditors (Amounts falling due within one year) 10

### Net Current Assets

### Total Net Assets

### Capital and Reserves
- Capital Account 14
- Income and expenditure account

### Total Capital Employed

The financial statements were approved by the board of directors on 13 June 2006 and signed on its behalf by:
The Discovery Programme is funded by the Heritage Council