

Forest Biodiversity

PLANFORBIO

Programme leader: Prof. John O'Halloran



The PLANFORBIO research programme brings together researchers from University College Cork, Trinity College Dublin, Waterford Institute of Technology and Coillte in a multi-disciplinary study of the biodiversity of contemporary Irish plantation forests and native woodlands. This project is led by Professor John O'Halloran (UCC) and managed by Dr Sandra Irwin. The earlier BIOFOREST project provided much needed basic information on the biodiversity of Irish forest ecosystems, but a number of important subjects were outside the scope of that project. These included the study of biodiversity of reforested and intimately-mixed plantations, of native Irish woodlands and, more generally, of forest canopies. PLANFORBIO aims to address these fundamental gaps in our knowledge and also to conduct specific studies on Hen Harrier conservation and the control of *Rhododendron ponticum*. A primary aim of the programme will be to address forest diversity and management focusing on forest types that are currently being encouraged through State policies and financial incentives. These are the Irish forests of the future, and little is currently known about their capacity for biodiversity conservation. Having assessed the woodlands for diversity, the findings will inform management plans for Ireland's forest estate that allow maximum exploitation of their potential for maintenance and conservation of biological diversity. This programme will have a specifically focussed emphasis on outreach and information dissemination through workshops and seminars with target audiences such as forestry contractors and managers, and farm forest owners. PLANFORBIO also supports national strategic objectives of increasing the number of PhDs being trained in Ireland and will ultimately build research capacity that underpins a very important sustainable national industry.

Three projects in the PLANFORBIO programme got underway during 2007:

- **FORESTBIO:** Managing for biodiversity in a range of Irish forest types.
- **HENHARRIER:** Optimum scenarios for Hen Harrier conservation in Ireland.
- **RHODO:** Achieving effective *Rhododendron* control.

The first of these (FORESTBIO) aims to produce a comprehensive biodiversity survey of a number of Irish forest ecosystems. Forest species targeted by these surveys will include birds, invertebrates (both ground-dwelling and canopy invertebrates), ground-dwelling and epiphytic plants including those associated with the forest canopy. Biodiversity assessments will be conducted at a range of Irish forest sites including reforested plantations, mixed species plantations and native woodlands using a variety of specialist techniques. The RHODO project will address the complexity of the rhododendron control process and investigate ways to make this process more cost-effective. The project aims to tackle these issues in a practical manner that will safeguard environmental quality and to develop alternative methods and skills for controlling a non-native invasive species such as *Rhododendron ponticum*. The third of these projects (HENHARRIER) will look at Hen Harrier ecology, habitat requirements and foraging behaviour as well as compiling a GIS database as a tool to aid decision making in the management of Special Protection Areas for this species. Further information can be found on the programme website at www.ucc.ie/en/planforbio.

This thematic area is also addressed by a stand-alone project, **FUNCTIONALBIO:** Functional biodiversity in forests: diversity of soil decomposers and predatory and parasitic arthropods.