

OLLSCOIL NA hÉIREANN  
NATIONAL UNIVERSITY OF IRELAND, GALWAY

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SUMMER EXAMINATIONS, 2002

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**B.Sc. DEGREE (HONOURS: DENOMINATED DEGREE IN  
ENVIRONMENTAL SCIENCE)**

**QUATERNARY PALAEOECOLOGY (BT402) AND  
APPLIED ECOLOGY (BT406)**

Professor M.J. Dring  
Professor E. Colleran  
Professor M. O'Connell  
Dr J. Fuller

Time allowed: **Three** hours.

Answer **three** questions, **at least one** from each section.

**SECTION A**

1. Discuss ice-core and land-based records as complementary sources of evidence for climate change during the Quaternary.
2. Outline the course of woodland development in Ireland during the early Holocene and discuss the factors responsible for regional differentiation.
3. "Human impact has been the dominant factor affecting natural vegetation in Ireland since the introduction of farming." Discuss.

**SECTION B**

4. Discuss in detail the challenges associated with the conservation and restoration of peatland habitats. Why is an understanding of the ecology of these habitats essential for conservation purposes?
5. Critically evaluate the main State and EU structures for conservation of habitats in Ireland.
6. What factors should be considered when designing and managing a nature reserve? Provide examples from habitats or ecosystems with which you are familiar.