

**UNIVERSITY OF ABERDEEN
DEPARTMENT OF GEOGRAPHY**

STUDENTSHIP OPPORTUNITY IN PALYNOLOGY

Further details

Applications are invited for a PhD research studentship for a project entitled *Early-mid Holocene environmental change and human impact in the Isle of Skye and Inner Sound, Scotland*, to be supervised by Professor Kevin J Edwards. Applications are encouraged from those who have received an appropriate training in such disciplines as Geography, Environmental Sciences, Biology, Archaeology (especially with specialisation in Environmental Archaeology) and Geology. Candidates should have, or expect to obtain, at least an upper second class honours degree prior to taking up the award for the academic session 2000-2001. A Masters degree is not mandatory, but could be advantageous.

The project: the aim of the project is to use palynological and related methods to determine the characteristics of the early to mid Holocene environments of the study area and the existence and nature of any human impacts (especially relating to the Mesolithic and Neolithic periods). The research area will include the Inner Hebridean island of Skye, possible islands within the Inner Sound, and the adjacent mainland peninsula of Applecross.

The Inner Hebrides is an area from which both early archaeological¹⁻³ and palynological evidence for probable early human impacts on environment have been obtained^{4,5}. The coastal location and biotic resources of the area made it attractive to Mesolithic peoples, while the presence of early lithic finds of at least early Holocene and conceivably Lateglacial/Palaeolithic age² suggests that much remains to be revealed. The palynology and archaeology of the proposed research area are not comprehensively known, but some background information is available^{3,6-10}. It is clear that appropriate deposits for environmental study exist and that the remains of hunter-gatherer communities are much more frequent than was appreciated formerly¹¹.

It is envisaged that the student will examine peat and lake sediments using close-sampling procedures, possibly on a 'three-dimensional' basis using multiple cores. Apart from pollen analysis, microscopic charcoal¹² and sedimentological analyses of deposits as an aid to determining landscape impact¹³ will be required. The project will involve collaboration with archaeologists on the 'Scotland's First Settlers' (SFS) project - a regional study of the Mesolithic and early Neolithic periods. One of the three SFS project directors, Caroline Wickham-Jones, is willing to answer archaeological queries (email: c.wickham-jones@dial.pipex.com) and the SFS Newsletter may be consulted on <http://www.pabay.org/sfsnl01.html>

Training element: field and survey techniques; stratigraphic recording and interpretation; laboratory techniques including the extraction and identification of pollen and charcoal, plus relevant sedimentology; computer-based data analysis and presentation; involvement in appropriate departmental and inter-university training courses, including seminar programmes.

The successful applicant will join the flourishing Environmental Processes and Change research group within a department which is proactively building on its already existing major research presence. A second academic post in palaeoecology is in the process of being filled and there are many external research links in Scotland and beyond.

Professor Edwards will be happy to discuss applications and can be contacted via email: k.j.edwards@sheffield.ac.uk; or Tel: 0114 230 9153.

Prospective applicants should, at the earliest opportunity, send a *c.v.* including the names of two referees and a covering letter explaining your suitability for the studentship, to Dr Hayden Lorimer, Department of Geography, University of Aberdeen, Elphinstone Road, Aberdeen AB24 3UF. The closing date for applications is 21 April 2000

References

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- ⁴ Hirons, K.R. and Edwards, K.J. (1990). Pollen and related studies at Kinloch, Isle of Rhum, Scotland, with particular reference to possible early human impacts on vegetation. *New Phytologist* 116, 715-727.
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- ⁶ Armit, I. (1996). *The archaeology of Skye and the Western Isles*. Edinburgh: Edinburgh University Press.
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- ⁹ Walker, M.J.C., Ballantyne, C.K., Lowe, J.J., & Sutherland, D.G. (1988). A reinterpretation of the Lateglacial environmental history of the Isle of Skye, Inner Hebrides, Scotland. *Journal of Quaternary Science* 3, 135-146.
- ¹⁰ Walker, M.J.C. & Lowe, J.J. (1990). Reconstructing the environmental history of the last glacial-interglacial transition: evidence from the Isle of Skye, Inner Hebrides, Scotland. *Quaternary Science Reviews* 9, 15-49.
- ¹¹ Finlayson, B., Hardy, K. and Wickham-Jones, C. (1999). Inner Sound. *Discovery and Excavation in Scotland* 49-50.
- ¹² Edwards, K.J. (1990). Fire and the Scottish Mesolithic: evidence from microscopic charcoal. In Vermeersch, P.M. and Van Peer, P. (eds) *Contributions to the Mesolithic in Europe*. Leuven University Press, Leuven, 71-79.
- ¹³ Edwards, K.J. and Whittington, G.W. (1993). Aspects of the environmental and depositional history of a rock basin lake in eastern Scotland, UK. In McManus, J. and Duck, R.W. (eds) *Geomorphology and sedimentology of lakes and reservoirs*. John Wiley & Sons, Chichester, 155-180.