Letter to the Editors

ANOMALOUS GLACIAL ERRATICS IN THE SOUTHERN PART OF THE OUTER HEBRIDES

SIRS,—Dr. Coward's paper (1977) forms part of an increasing body of evidence that the glacial history of the Outer Hebrides was very different from that envisaged by James Geikie and subsequent researchers. The Institute of Geological Sciences is currently surveying this district, and mapping by the writers shows conclusively that glacier ice, probably of the last (Devensian) glaciation, crossed Benbecula and the Uists in an easterly or east-south-easterly direction. Our work also supports in general the suggestion by J. von Weymarn (1974) that Lewis and Harris were glaciated chiefly by local ice centred on W Harris and S Lewis. This picture of ice movement requires dispersal centres on the continental shelf immediately W of the Outer Hebrides as well as over the more mountainous parts of the islands, and raises fundamental issues concerning the genesis and mass balance of Devensian ice of Britain.

In the extreme N of Lewis the deposits laid down by ice thought to come from the Scottish mainland and referred to the Devensian glaciation by von Weymarn and Edwards (1973) include glaciolacustrine/glaciofluvial sequences with interbedded shelly tills, some of which are subaqueous flow-tills. This part of the island yields evidence of deep weathering, early deglaciation and intense periglacial activity.

Following the decay of the main Devensian ice in the Outer Hebrides, there is evidence that glaciers regenerated on a small scale at some localities with summits of 400 m OD or more, leading to the formation of terminal moraines, for example the fine crescentic moraine in Glen Cravadale in Harris [NB 023 125]. Such features resemble those associated with the Loch Lomond Readvance of the Scottish mainland. Some of the periglacial landforms outwith the inferred readvance limit, such as the relatively low-level stone lobes on Beinn Dhubh (South Harris) might be referred to this period.

REFERENCES


J. D. PEACOCK
D. L. ROSS

Institute of Geological Sciences
Edinburgh

*MS accepted for publication 30th November 1977*

Scott. J. Geol. 14, (3), 262, 1978