# Bedrock and Superficial geology of the Newtonmore–Ben Macdui district: description for sheet 64 (Scotland)

R A Smith, J W Merritt, A G Leslie, M Krabbendam and D Stephenson *Contributors* B C Chacksfield, N R Golledge, E R Phillips

(Front cover)

### **Contents**

## **Title page and preliminaries**

Foreword

Acknowledgements

Summary

#### 1 Bedrock geology

- 1.1 Introduction
- 1.2 Previous work
- 1.3 Lithostratigraphy
- 1.3.1 Glen Banchor Subgroup of the Badenoch Group
- 1.3.2 Dalradian Supergroup
- 1.4 Igneous intrusions
- 1.4.1 Neoproterozoic to Ordovician: pre- and syntectonic intrusions
- 1.4.2 Caledonian Igneous Supersuite
- 1.5 Structure and metamorphism
- 1.5.1 Ductile deformation
- 1.5.2 Regional metamorphism
- 1.6 Faulting
- 1.7 Geophysics

# 2 The physiography, Cainozoic landscape evolution and Quaternary geology of the district

- 2.1 Physiography
- 2.2 Landscape evolution during the Cainozoic era
- 2.3 The Quaternary record

2.3.1 Pre-Late Devensian events
2.3.2 Late Devensian
2.3.3 The pattern of deglaciation
2.3.4 The Windermere (Lateglacial) Interstadial
2.3.5 The Loch Lomond Stadial
2.3.6 Holocene
2.4 Quaternary geology of the Eastern Grampian Highlands
2.5 Lithostratigraphy of the Newtonmore–Ben Macdui district
2.6 Superficial deposits and Quaternary landforms
2.6.1 Till
2.6.2 Morainic deposits
2.6.3 Glaciofluvial deposits
2.6.4 Glacioclacustrine deposits
2.6.5 Alluvial and organic deposits
2.6.6 Periglacial deposits
2.6.7 Landslide deposits
2.6.8 Features of glacial erosion
2.6.9 Features of glaciofluvial erosion
3 Applied geology
3.1 Mineral resources, quarrying and mining
3.1.1 Mineralisation
3.1.2 Road stone, building stone, sand and gravel, clay
3.1.3 Peat
3.2 Groundwater/aquifers
3.3 Geology, planning, hazards and heritage
3.3.1 Geological heritage and geodiversity
4 Information sources

4.1 BGS maps

4.2 BGS books

- 4.3 BGS documentary collections
- 4.4 BGS material collections

#### **References**

# **Figures**



# Geology of the Newtonmore – Ben Macdui district

Geology and Landscape Open Report OR/11/055



(Front cover) James Hutton's Locality above Dail-an-Eas Bridge [NN 9388 7467], looking north-east up Glen Tilt whose trend is largely controlled by the Loch Tay Fault. Here Hutton observed granite veins cutting and recrystallising Dalradian metasedimentary rocks and deduced that granite crystallised from a hot liquid. BGS Imagebase P601616.