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# The geology of Northern Skye

Explanation of the Portree (80) and parts of the Rubha Hunish (90), Applecross (81) and Gairloch (91) sheets

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Institute of Geological Sciences, Natural Environment Research Council

Memoirs of the Geological Survey of Great Britain, Scotland

Edinburgh: Her Majesty's Stationery Office 1966

Frontispiece (Plate 1) (D3173) A. The Storr from the south; part of the Trotternish lava-scarp (D3172) B. Landslip topography south of Flodigarry Hotel (D3171) C. Staffin Bay from the North

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## Preface

The area described in the present memoir was surveyed on the six-inch to the mile scale by the late J. K. Allan, the late D. Haldane, Mr J. Knox, Mr. T. R. M. Lawrie, Dr. T. Robertson with the late G. V. Wilson as District Geologist between the years 1934–39. Certain marginal areas, partly surveyed in 1894–98 by A. Harker and H.B. Woodward, were re-examined by Messrs. F. W. Anderson, J. Knox and T. R. M. Lawrie. The Jurassic coastal areas were visited by C. B. Wedd in 1912 and in 1913 by G. W. Lee, who made certain modifications in the earlier mapping. During 1936–38 and 1947 Dr. F. W. Anderson made a detailed examination of the Jurassic and Tertiary sediments and remapped some areas. The late Dr. L. F. Spath contributed greatly by identifying all the ammonites and the late Sir Albert Seward and the late W. N. Edwards reported on the Tertiary plants. The remaining fossils have been identified by Dr. F. W. Anderson. The petrographical investigation of the lavas and minor intrusions begun by Dr. K. C. Dunham during his period as Chief Petrographer was continued by him after he resigned to become Professor of Geology at Durham.

The maps have been compiled and seen through the press by Dr. Anderson; the composite one-inch map comprising the Portree (80) Sheet, the Skye portion of the Rubha Hunish (90) Sheet and part of the Applecross (81) and Gairloch (91) sheets was published both in solid and drift editions in 1964. Dr. Anderson has also written the memoir except for chapters 7, 9, and 10, dealing with the petrography, which are the work of Professor Dunham. The memoir has been edited by Dr. G. H. Mitchell.

C. J. Stubblefield Director. Geological Survey Office Exhibition Road, South Kensington, London, S.W.7. 5th May, 1965.

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List of Six-inch maps

Geological six-inch maps included wholly or in part in the area covered by the one-inch map of Northern Skye are listed below with initials of the surveyors and dates of survey. The surveyors were J. K. Allan, F. W. Anderson, D. Haldane, J. Knox, T. R. M. Lawrie, T. Robertson and G. V. Wilson.

The maps all belong to the County Series. Maps on the National Grid were not available at the time of preparation. The completed maps are deposited at the Geological Survey Office, 19 Grange Terrace, Edinburgh, 9, where they are available for public reference.

1 N.E.	Fladda-chuain	D.H.	1934
2 S.W.	Rubha Hunish	D.H., F.W.A.	1935–36
3 N.E.	An t'lasgair	D.H.	1934
3 S.E.	Kilmuir	D.H., F.W.A.	1934–36
4 N.W.	Kilmaluag	D.H., F.W.A.	1935–36
4 N.E.	Bagh nan Gunnaichean	D.H., F.W.A.	1934–36
4 S.W.	Heribusta	D.H., F.W.A.	1934–36
4 S.E.	Flodigarry	D.H., F.W.A.	1934–36
5 N.W.	Vaternish Point	D.H.	1935
5 S.W.	Unish	D.H.	1935
5 S.E.	Eilean Iosal	D.H.	1935
6 N.E.	Balgown	D.H., F.W.A.	1935–36

6 S.W.	Sgeir a'Chapuill	D.H.	1935
6 S.E.	Totscore	LK., F.W.A.	1934–36
7 N.W.	Suidh' a'Mhinn	D.H.	1934
7 N.B.	Stenscholl	D.H., F.W.A.	1934–36
7 S.W.	Ben Gorm	J.K.	1934
7 S.E.	Loch Dubhar-Sgoth	J.K.	1934
8 N.W.	Rubha Garbhaig	D.H., F.W.A.	1934–36
8 S.W.	Loch Mealt	J.K., F.W.A.	1934–36
9 N.W.	Trumpan	D.H., F.W.A.	1935–37
9 N.E.	Geary	D.H.	1935
9 S.W.	Ardmore Point	D.H.	1935
9 S.E.	Score Horan	D.H.	1935
10 N.W.	South Ascrib	D.H.	1935
10 N.E.	Earlish	J.K.	1934–35
10 S.W.	Creagan Glasa	D.H.	1935
10 S.E.	Lyndale Point	D.H., J.K.	035–36
11 N.W.	Beinn Fhuar	J.K.	1934–35
11 N.E.	Beinn Edra	J.K.	1934–35
11 S.E.	Creag a'Lain	J.K.	1935–37
12 N.W.	Lealt	J.K., F.W.A.	1934–37
12 S.W.	Creag Langall	J.K., F.W.A.	1934–37
14 N.E.	Dunvegan Head	D.H.	1939
14 S.E.	Boreraig	J.K.A., D.H.	1938–39
15 N.W.	Lovaig Bay	D.H.	1935–36
15 N.E.	Loch Bay	D.H., F.W.A.	1935–37
15 S.W.	Beinn Mhic Uilleim	D.H.	1936–39
15 S.E.	Bay River	D.H.	1936
16 N.W.	Greshornish	D.H.	1935–36
16 N.E.	Kildonan	D.H., J.K.	1936–38
16 S.E.	Flashader	D.H., J.K.	1938–39
17 N.W.	Kingsburgh	J.K.	1936
17 N.E.	Hartaval	J.K.	1936
17 S.W.	Eyre	J.K., G.V.W.,	1936–37
17 S.E.	Glenhaultin	J.K., G.V.W.	1936–37
18 N.W.	The Storr	J.K., F.W.A.	1935–37
18 S.W.	Loch Leathan	F.W.A., G.V.W.	1935–37
20 N.W.	Oisgill Bay	J.K.A., F.W.A.	1938
20 N.E.	Holmisdal	J.K.A.	1938
20 S.W.	Eist	J.K.A., F.W.A.	1938
20 S.E.	Beinn nan Corrafidheag	J.K.A.	1938
21 N.W.	Colbost	J.K.A., D.H.	1935–36
21 N.E.	Dunvegan	J.K.A., D.H.	1935–36
21 S.W.	Skinidin	J.K.A., D.H.	1935, 1938
21 S.E.	Kilmuir	J.K.A., D.H.	1935–37
22 N.W.	Strone Geers	D.H.	1936
22 N.E.	Ben Uigshader	D.H., J.K.	1938–39
22 S.E.	Loch Ravag	D.H., J.K.	1937–38
23 N.W.	Tote	J.K., G.V.W.	1935, 1938
23 N.E.	Borve	G.V.W.	1935–36
23 S.W.	Beinn a'Ghlinne Bhig	J.K., G.V.W.	1935, 1938
23 S.E.	Glengrasco and N.W. Portree	G.V.W.	1935



24 N.W.	Loch Fada and Lon nam Breac	F.W.A., G.V.W.	1935–36, 1939
24 S.W.	Torvaig and N.W. Portree	F.W.A., T.R.M.L., G.V.W.	1935–36, 1939
26 N.E.	Ramasaig	J.K.A., D.H.	1938
26 S.E.	Lorgill Bay	D.H.	1938
27 N.W.	Healaval Bheag	D.H.	1938
27 N.E.	Orbost	J.K.A., D.H.	1935, 1937–38
27 S.W.	Glen Ollisdal	D.H.	1938
27 S.E.	Harlosh Point	D.H.	1937–38
28 N.W.	Loch Caroy	D.H., T.R.	1935, 1937
28 N.E.	Ben Scudaig	D.H., J.K., T.R.	1935, 1937–38
28 S.W.	Colbost	D.H., T.R.	1935, 1937
28 S.E.	Bracadale	T.R.	1935
29 N.W.	Am Maol	J.K., G.V.W.	1935–37, 1939
29 N.E.	S.W. Portree and Beinn na Greine	J.K., G.V.W.	1935–37
29 S.W.	Loch Duagrigh	J.K., T.R.	1935, 1937, 1939
29 S.E.	Mugeary	J.K., G.V.W.	1935, 1937
30 N.W.	Camas Ban and S.E. Portree	T.R.M.L., G.V.W., F.W.A.	1936, 1939
30 S.W.	Creag a'Chait	T.R.M.L., G.V.W., F.W.A.	1935, 1939
32A	Mi-bogha Mor	D.H.	1937
32 N.W.	Flossnan	D.H.	1937–38
32 N.E.	Idrigill Point	D.H.	1938
33 N.W.	Oronsay and Wiay	D.H., T.R.M.L.	1935, 1937, 1939
33 N.E.	Sumardale	T.R.M.L., T.R.	1935, 1939
34 N.W.	Glen Vidigill	J.K.	1939
34 N.E.	Meall an Fhuarain	J.K., T.R.M.L.	1939
35 N.W.	Beinn nan Capull	T.R.M.L., F.W.A.	1938–39
35 N.E.	Dunan an Aisilidh	T.R.M.L., F.W.A.	1938–39



(D3173)

A. THE STORR FROM THE SOUTH; PART OF THE TROTTERNISH LAVA-SCARP



(D3172)

B. LANDSLIP TOPOGRAPHY SOUTH OF FLODIGARRY HOTEL



(D3171)

C. STAFFIN BAY FROM THE NORTH

(Plate 1) A. The Storr from the south; part of the Trotternish lava-scarp. Landslipped lavas and Jurassic sediments form the ground to the right of the escarpment. In the foreground a glacially eroded hollow in Jurassic sediments is occupied by the two lochs Fada and Leathan, which supply water for the Bearreraig Hydro-electric Station. (D3173, replaces MN20706); B. Landslip topography south of Flodigarry Hotel. In the foreground slipped masses of Tertiary lava and Jurassic sediments. In the distance the headland of Rubha Garbhaig is of Tertiary dolerite sills in Jurassic sediments. (D3172, replaces MN20704); C. Staffin Bay from the north. On the foreshore are upper Jurassic sediments. In the middle distance Staffin Point (An Corran) is formed by two dolerite sills with Jurassic sediments between them. Behind the storm beach the 25-ft and 50-ft beach flats are well seen and correspond with the rock notches seen in An Corran. (D3171, replaces MN20705) Frontispiece.



(C2241)

A. BEARRERAIG, SIX MILES NORTH-NORTH-EAST OF PORTREE  
*Inferior Oolite sandstone giving rise to waterfall*



(C3919)

B. LYNDALE POINT, 100 YD FROM SHORE, 1530 YD NORTH-NORTH-WEST  
OF LYNDALE HOUSE  
*Dolerite dyke showing columnar jointing*

(Plate 2) A. Bearreraig, six miles north-north-east of Portree. Inferior Oolite sandstone giving rise to waterfall. (C2241) B. Lyndale Point, 100 yd from shore, 1530 yd north-northwest of Lyndale House. Dolerite dyke showing columnar jointing. (C3919).



(C2244)

A. BEARRERAIG BAY, 6½ MILES NORTH-NORTH-EAST OF PORTREE  
*Columnar sill of dolerite overlying Inferior Oolite*



(C3898)

B. COAST, SOUTH OF MEALT WATERFALL, LOOKING NORTH FROM VALTOS  
*Great Estuarine Series with intruded sills of dolerite*

(Plate 3) A. Bearreraig Bay, 6½ miles north-north-east of Portree. Columnar sill of dolerite overlying Inferior Oolite. (C2244) B. Coast, south of Mealt Waterfall, looking north from Valtos. Great Estuarine Series with intruded sills of dolerite. (C3898).



(C3899-3900)

THE QUIRANG, LOOKING NORTH-EAST FROM UIG ROAD  
*Escarpment of Tertiary lavas with extensive area of landslipped masses of Tertiary volcanic material.  
Staffin is on the extreme right*

*(Plate 4) The Quirang, looking north-east from Tug road. Escarpment of Tertiary lavas with extensive area of landslipped masses of Tertiary volcanic material. Staffin is on the extreme right. (C3899–3900).*