
RockTrails

Scottish Highlands

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To the
memory of
Catherine Lowe
and
Mackie Swanson

Ben Nevis from Aonach Beag



Contents

Introduction	7
CHAPTER 1 Before Scotland.....	11
CHAPTER 2 Gnarly Gneiss.....	17
CHAPTER 3 Torrid Torridonian.....	25
CHAPTER 4 Cambrian Capping	35
CHAPTER 5 Thrusting Times	43
CHAPTER 6 Metamorphic Menu.....	55
CHAPTER 7 Dalradian Deformation	63
CHAPTER 8 Grampian Granite.....	71
CHAPTER 9 Igneous Intrusion	77
CHAPTER 10 Atlantic Appearance	89
CHAPTER 11 Glacial Gouging.....	95
About the Walks	111
Walk #1 Arkle.....	117

Walk #2	Ben Stack	125
Walk #3	Quinag	131
Walk #4	Breabag	139
Walk #5	Meall a' Ghuibhais	151
Walk #6	Coire Mhic Fhearchair (Beinn Eighe).....	159
Walk #7	Beinn Bhan	165
Walk #8	Sgurr an Airgid.....	175
Walk #9	Cairn Gorm	181
Walk #10	Creag Meagaidh	189
Walk #11	Glen Roy	195
Walk #12	Ben Nevis	299
Walk #13	Glen Nevis	207
Walk #14	Ben Hiant (Ardnamurchan)	213
Walk #15	Meall nan Con (Ardnamurchan).....	217
Walk #16	Bidean nam Bian (Glen Coe).....	223
Walk #17	Meall nan Tarmachan ridge.....	231
Walk #18	Ben Lomond	239
	Acknowledgements & Sources	244
	Glossary of Geological & Geomorphological Terms	246
	Index of Place Names.....	249

Introduction

The Scottish Highlands are home to Britain's most spectacular mountain scenery. The stark hills, fearful crags, glorious glens and sparkling lochans make for a wide range of landscapes and have attracted generations of landscape lovers, hillwalkers and mountaineers of all description.

This book is intended to help those who adore this landscape to gain an insight into the geological forces that have shaped it. My aim is to explain, in clear straightforward language, why the basic ingredients of hill and glen are able to produce such a remarkably rich mix of landscape types. The mountains and valleys have a fascinating geological history; it is my aim in this book to delve into that history and extract a narrative that is accessible to the ordinary hillwalker and mountaineer. It is a fascinating story which I hope will open your eyes to seeing the landscape in new and more intimate ways.

Photo 0.1

The deeply eroded ancient landscape of northwest Scotland: Cul Mor (right), Canisp (centre) and Suilven (left) seen from Stac Pollaidh. The low ground rocks are up to 3 billion years old.



The book is divided into two parts. The first tells the story of how the rocks were created and shaped by the gross forces of plate tectonics, colliding continents, volcanoes, mountain-building and glaciation. We look back over thousands of millions of years to discover some of the world's oldest rocks in the northwest of the Highlands. We also dig into less ancient geological history, seeking scenic evidence of the powerful glaciers that carved out the present-day landscape in the fairly recent past just a few thousand years ago.

The second part of the book describes 18 recommended walks with a variety of geological features set among consistently fantastic views. The walks are widely spread, encompassing the isolated peaks of Sutherland in the far northwest, the rolling granite massif of the Cairngorms in the east, the haunting beauty of the Ardnamurchan peninsula in the west and a select choice from the vast range of stunning mountains in the central and southern Highlands.

Photo 0.2

The intensely deformed rocks of the Grampian Highlands: the Grey Corries seen from Aonach Mor. The rocks date from around 500 million years ago.



The book is limited to the Highlands so it does not cover the equally amazing geology and stunning scenery of the Scottish islands nor the varied landscapes to the south of the key geological feature known as the 'Highlands Boundary Fault' (see Chapter 1). This geographic limitation is logistically essential; to cover the geology of all these areas as well as the Highlands would have demanded either a much bigger book or have meant that less-than-adequate space could be devoted to the mountains of the Highlands.

I have written about what you can see around you as you walk the hills and glens. There is no need to carry any special geological tools such as a hammer or hand lens; it is also unnecessary to take samples back to the laboratory and subject them to various indignities in order to analyse them. I point instead to often quite conspicuous features in the rocks and the overall shape of the terrain in 'reading' the present-day landscape.

While geology is a fascinating subject, it is also a science and relies on a complex scientific terminology. My aim has been to minimise the use of jargon and make the processes that have shaped the landscape comprehensible to the average reader. This has meant some simplification of the jargon and a pruning of the detail. All the same, we will have to deal with a minimal set of terms such as 'plate tectonics', 'plastic deformation', 'magma', 'moraines' and the like.



Photo 0.3 | Eigg (right) and Rum (left) seen from Ardnamurchan; these volcanic rocks date from 60 million years ago.

When I first use a piece of jargon I have put it in quote marks (for example, ‘continental plate’). Many of these terms are defined in the Glossary, but I have sometimes assumed that the meaning of a term is obvious from the context in which it appears.

While reading the book, the reader may well find it useful to have some maps of the areas covered to hand. This gives a good appreciation of the topographical structure of the landscape features under discussion. It also helps with locating places mentioned in the text (with the help of the list of grid references for all local places found at the back of the book).

Given the considerable area covered by the Highlands, a highly cost-effective and practical approach is to buy the computer-based version of the Ordnance Survey’s 1:50,000 maps for the whole of Britain. At the time of writing (early 2012) this could be obtained for less than £70; online versions are also becoming available quite cheaply. Maps are discussed further in the section ‘About the Walks’.



Photo 0.4 | Binnein Mor