
The geology of Western Shetland

By W. Mykura and J. Phemister

(Front cover)

Contents

[Title page and other preliminaries](#)

Preface by the Director

List of illustrations

[List of 6" maps](#)

[Chapter 1 Introduction](#)

Location and Area, Physical Features, History of Research, Summary of Geology, References

[Chapter 2 The Lunnister metamorphic rocks](#)

Introduction, Banded Gneiss Group, Calcareous Group, Green Beds Assemblage, Clothister Hill Magnetite and Skarn, Western Unclassed Rocks, Structural Interpretation, References

[Chapter 3 The Metamorphic rocks in the Muckle Roe-Northmaven Complex](#)

Introduction, Lithology, Djubi Dale Enclave, Skipadock area, Egilsay, Busta Peninsula, Muckle Roe, Busta Isthmus, Petrography, Siliceous and Semipelitic Rocks, Pelitic Schists, Basic Rocks, Outlying Xenolithic Bodies of Basic Gneiss, Summary

[Chapter 4 The Metamorphic rocks of the Walls Peninsula](#)

Introduction, Lithology, Vementry Group, Neeans Group, West Burra Firth Group, Snarra Ness Group, Granite and Pegmatite Veins and Intrusions, Structure, : Geometry of Main Structural Elements, Main Phase of Folding, Phase of Intense Shearing, Kink Bands and Conjugate Kink Folds, Regional Tilting, Late NNW-trending Folds, NE to NNW-trending Faults and Associated Conjugate Folds, Metamorphic History, Possible deformation and mineral growth prior to main tectonizing metamorphism, Main Phase of Folding and Associated Metamorphic Episodes, Retrograde Metamorphism, Late Thermal Metamorphism, References

[Chapter 5 Ve Skerries](#)

Field Relationships, North Skerry, Ormal, The Clubb, Petrography, Granite-Gneiss, Foliated Granite, Schistose Rocks, References

[Chapter 6 Metamorphic and intrusive rocks of Foula](#)

Introduction, Metamorphic Rocks, Field Relationships, Petrography, Granitic Minor Intrusions, Petrography, Faults and Crush Belts, Reference

[Chapter 7 Old Red Sandstone: Sandness Formation](#)

Introduction, Junction between Sediments and Metamorphic Rocks, Sediments below the Clousta Volcanic Rocks, Basal Sediments, Sandstones and Conglomerates below Clousta Volcanic Rocks, Petrography, Conditions of Deposition,

Clousta Volcanic Rocks and Associated Sediments, Area East of Brindister Voe, Area West of Brindister Voe, Flora, Petrography, Environment of Deposition, References

[Chapter 8 Old Red Sandstone: Walls Formation](#)

Introduction, Lithology, Coast between Wats Ness and Wester Sound, Vaila Sound and Vaila, Gruting Voe, Seli Voe, Scutta Voe and Voe of Browland, Area between Lunga Water and Walls Boundary Fault, Rea Wick-Roe Ness Peninsula, Sedimentary Enclaves within Sandsting Complex, Fauna and Flora, Petrography, Environment of Deposition, References

[Chapter 9 Walls Sandstone: Structure](#)

Structures attributed to the First Phase of Folding (F1), Structural Units of the Synclinorium, Northern Limb, Hinge Zone, Southern Limb, Structures attributed to Second Phase of Folding (F2), Comparison with other Areas of Late-Caledonian Folding, References

[Chapter 10 Old Red Sandstone: Melby Formation](#)

Introduction, Stratigraphy, Strata below Lower Melby Fish Bed, Lower Melby Fish Bed, Strata between Lower and Upper Melby Fish Beds, Upper Melby Fish Bed, Strata above Upper Melby Fish Bed Melby Rhyolites, Fauna, Petrography, Conditions of Deposition, Holm of Melby, References

Chapter 11 Middle Old Red Sandstone volcanic rocks and sediments of Papa Stour

Introduction, Basal & Lower Tuffs And Sandstones, Rhyolites And Inter-Rhyolitic Tuff, Structure, Geology Of Forewick Holm, References

[Chapter 12 Old Red Sandstone of Foula](#)

Introduction, Field Relationships, Conditions Of Imposition, Petrography, Structure, References

[Chapter 13 The Northmaven-Muckle Roe Plutonic Complex](#)

Introduction, Early Hypabyssal Intrusions, The Plutonic Complex, Field Relations, Ultrabasic Rocks, Diorite and Gabbro, Granites and Granophyre, Petrography, Ultrabasic Rocks, Gabbro and Diorite, The Larger Granite Masses, The Smaller Acid Bodies and Veins, Late Hydrothermal Activity, Field Relationships, Petrography, Evolution of the Igneous Complex, References

[Chapter 14 Vementry Granite](#)

Field Relationships, Petrography, Outer Granite, Inner Porphyritic Granite, Reference

[Chapter 15 The Sandsting Granite-Diorite Complex](#)

Introduction, Diorites and Associated Rocks, Granodiorite, Porphyritic Microadamellite and Associated Rocks, Granite, Granite Veining in shattered Sediment within Sandsting Complex, Late fine-grained Acid and Basic Intrusions, The Metamorphic Aureole, Scapolitized Crush Zones within the Sandsting Complex, Structure and Mode of Emplacement of the Complex, References

[Chapter 16 Minor intrusions](#)

Introduction, Basic and Intermediate Minor Intrusions: Field Relationships, Northmaven and Muckle Roe, Walls Peninsula and adjacent areas, Petrography, Basic Minor Intrusions, Dykes of Intermediate Composition, Acid Minor Intrusions, Field Relationships, Northmaven and Muckle Roe, North shore of Walls Peninsula and Adjacent Islands, Petrography, References

[Chapter 17 Major transcurrent faults](#)

Walls Boundary Fault, Outcrops of Fault, Tectonic History, Direction and Amount of Movement, Melby Fault, Conclusion, References

[Chapter 18 Recent and Pleistocene](#)

Mainland, Muckle Roe and Papa Stour, Introduction, Glacial Deposits, Interglacial Deposit, Evidence for Direction of Ice Flow, Corrie Glaciation, Glacial Retreat Phenomena, Periglacial and Post-Glacial Deposits, Peat, Post-Glacial Changes in Sea Level, Foula, References

[Chapter 19 Economic geology](#)

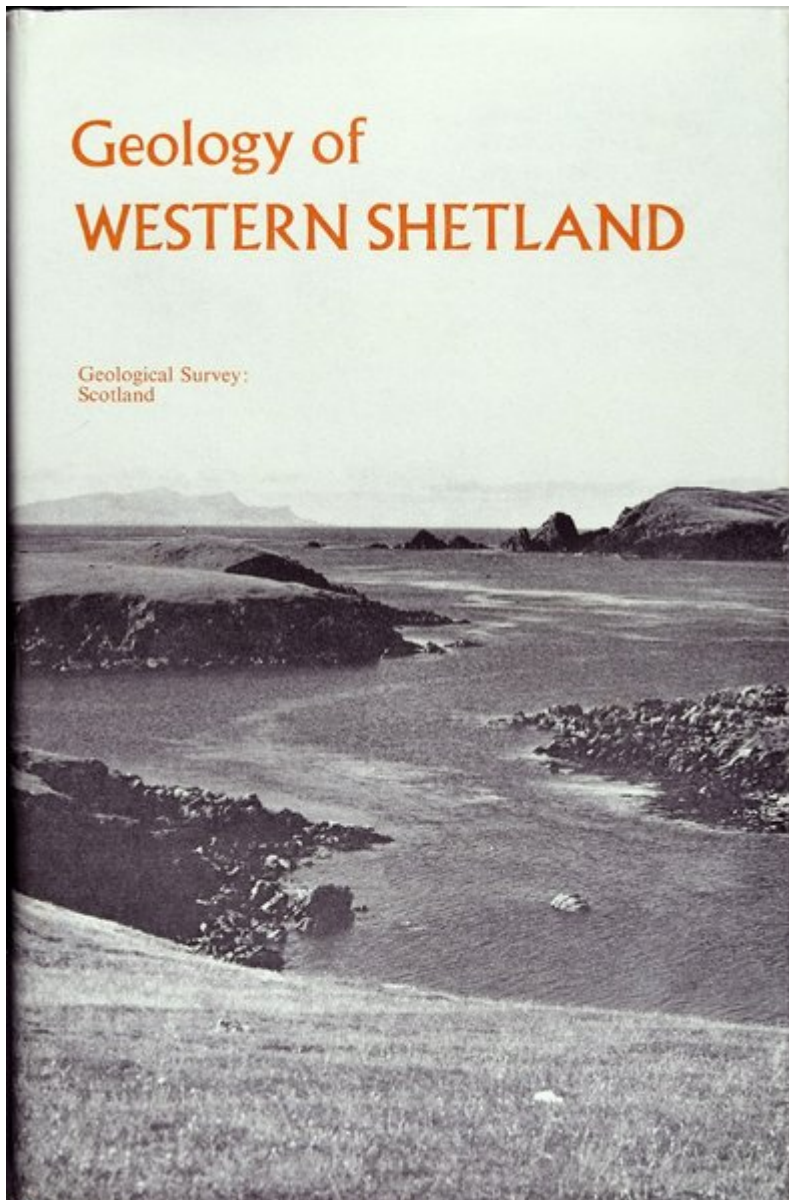
Clothister Hill Magnetite, Road Metal, Building Materials, Limestone, Peat, Ornamental and Semi-Precious Stones, References

[Appendix. List of Geological Survey photographs](#)

[Figures, plates and tables](#)

[Hand specimen photographs from the BGS Systematic Series](#)

[British Geological Survey maps — Links to 1:63,360 and 1:10,560 maps](#)



(Front cover)