

Table of Contents

List of figures	xi
List of tables	xv
Editorial Note	xvii
Abbreviations	xviii
Abstract	xix
1. Introduction	1
1.1. Aims and Objectives	3
1.2. Method and Approach	4
1.3. Research Limitations and Implications	5
1.4. Summary.....	8
2. Romans and Scottish Landscapes	9
2.1. An Early Frontier Zone?.....	10
2.2. Historical Background.....	12
2.3. Interpretation Influences	14
2.3.1. Tacitus	14
2.3.2. Richard of Cirencester	15
2.4. Native and Roman Interaction.....	15
2.5. Roman Military Infrastructure.....	17
2.5.1. Other Structures	18
2.5.2. Legionary Fortress	18
2.5.3. Camps	19
2.5.4. Forts	19
2.5.5. Fortlets	20
2.5.6. Towers.....	21
2.5.7. Coastal Sites.....	21
2.5.8. Road Networks	21
2.5.9. Coastal and River Networks	25
2.6. Interpretation Challenges.....	27
2.6.1. Fortification Sequencing.....	28
2.6.2. Fortification Dating.....	31
2.7. Natural Environment	33
2.7.1. Water	35
2.8. Summary.....	36
3. Data and Methods	39
3.1. Data Collection and Sources.....	39
3.1.1. Roman Literary Texts	39
3.1.2. Legacy and Site Data	40
3.1.3. Mapping Data	40
3.2. Analytical Methods.....	41
3.2.1. Positioning: Defensive and Elevation.....	42
3.2.2. Intervisibility: Viewpoints, Binary Viewsheds and Lines-Of-Sight	43
3.2.3. Orientation	45
3.2.4. Interconnectivity	47
4. Location and Positioning	51
4.1. Classical Texts: Positioning.....	51

4.2. Positioning: Spatial Analysis.....	52
4.3. Analysis: Defensive Topography.....	53
4.4. Analysis: Site Elevation.....	57
4.5. Analysis: Binary Viewsheds	57
4.6. Summary.....	59
5. Intervisibility.....	63
5.1. Roman Signalling	63
5.2. Analysis: Line-Of-Sight (Signalling)	65
5.2.1. Towers on the Gask Ridge	67
5.2.2. Towers in Southern Scotland	74
5.3. Summary.....	76
6. Orientation	79
6.1. Classical Texts: Orientation.....	79
6.2. Orientation: Recent Studies	82
6.3. Analysis: Fortification Orientation	82
6.4. Analysis: Directions that Fortifications Face.....	93
6.5. Summary.....	100
7. Interconnectivity	103
7.1. Road Networks	103
7.2. River Networks.....	105
7.3. Classical Texts: Waterways	106
7.4. The Antiquarian Account.....	106
7.5. Analysis: Fortifications and Roads	106
7.6. Analysis: Coastal and River Networks	107
7.7. Analysis: River Crossings.....	108
7.8. Scotland's River Networks	108
7.8.1. River Tweed.....	108
7.8.2. Firth of Forth.....	110
7.8.3. Firth of Tay	113
7.8.4. Northeast and Moray Firth.....	116
7.8.5. Firth of Clyde.....	118
7.8.6. Southwest and Solway Firth	120
7.9. Summary.....	122
8. Discussion	127
8.1. Roman Control of Scottish Landscapes.....	128
8.2. Role of 'Temporary Encampments'.....	128
8.3. Intervisibility And Signalling: Testing a Methodology	130
8.4. Profiling Fortification Sites.....	130
8.5. Roman Military Strategies in Scotland.....	132
8.6. Profiling Fortifications Beyond Flavian Scotland	133
8.7. Research Opportunities.....	134
8.7.1. Fortifications Dating and Sequencing.....	134
8.7.2. The Indigenous Population	134
8.7.3. Signalling.....	135
8.7.4. Road Network.....	135
8.7.5. Water Levels	135
9. Conclusion	137
Bibliography	139
Appendix One: Flavian Sites.....	153
Appendix Two: Site Data.....	157
Index of Main Sites	163