

Contents

To the student	5	6.7 Salt marshes	55
1 Fieldwork projects	6	6.8 Coastal protection	56
1.1 Types of fieldwork	6	6.9 Sea-level change	57
1.2 How to choose a title	6	6.10 Project suggestions	58
1.3 Project method	10	7 Ecology and pollution	59
1.4 How to carry out a fieldwork study	11	7.1 Soils	59
1.5 Fieldwork safety	11	7.2 Project suggestions: soils	64
Part A: Collecting the information	13	7.3 Vegetation	66
2 Sampling	13	7.4 Project suggestions: vegetation	70
2.1 Why do we sample?	13	7.5 Air pollution	72
2.2 Avoiding bias	13	7.6 Project suggestions: air pollution	76
2.3 Sampling methods	14	7.7 Water pollution	77
2.4 Sample size	16	7.8 Project suggestions: water pollution	80
3 Geology, landforms and slopes	17	7.9 Ecology and pollution data sources on the Internet	80
3.1 Geology	17	8 Local climate	81
3.2 Weathering	17	8.1 Radiation and sunshine	81
3.3 Project suggestions	21	8.2 Temperature	81
3.4 Slope surveying	21	8.3 Humidity	83
3.5 Field sketching	23	8.4 Rain	84
3.6 Morphological mapping	23	8.5 Atmospheric pressure	85
3.7 Ordnance Survey maps	24	8.6 Wind	85
3.8 Photographs and postcards	26	8.7 Cloud	86
3.9 Sediment analysis of glacial and fluvio-glacial landforms	26	8.8 Meteorological observations	86
3.10 Project suggestions	30	8.9 Project suggestions	87
3.11 Geology data sources on the Internet	30	8.10 Local climate data sources on the Internet	88
4 Hydrology	31	9 Primary data sources in human geography	89
4.1 Inputs	32	9.1 Questionnaires	89
4.2 Movement of water within the drainage basin	32	9.2 Interviews and oral histories	91
4.3 Outputs	34	9.3 Perception studies	91
4.4 Secondary data sources	40	9.4 Space-time diaries	97
4.5 Project suggestions	41	10 Secondary data sources in human geography	98
5 River channels	42	10.1 Geographic Information Systems	98
5.1 River channel form	42	10.2 Maps	98
5.2 River load	44	10.3 Satellite images and aerial photographs	100
5.3 Project suggestions	47	10.4 The National Census	100
6 Coasts	48	10.5 Other central government population statistics	103
6.1 Wave energy	48	10.6 Parish registers	103
6.2 Beach profiles	49	10.7 Electoral registers	104
6.3 Longshore drift	50	10.8 Rateable values, rate books, council tax, the Land Registry	104
6.4 Beach sediment analysis	51	10.9 Directories	105
6.5 Cliffs	52	10.10 Local newspapers	106
6.6 Sand dunes	53	10.11 Planning data	106

11 Urban and rural studies	107		
11.1 Demographic change	107	13.6 Flow-line maps	141
11.2 Social structure of urban areas	108	13.7 Ray diagrams	142
11.3 Inner cities	113	13.8 Topological maps	142
11.4 Gentrification	114	14 Statistical methods	143
11.5 Council housing: architecture and indices of social breakdown	114	14.1 Mean, mode and median	143
11.6 Retailing	115	14.2 Spread around the median and mean	144
11.7 The impact of the closure of services in rural areas	118	14.3 Correlation	146
11.8 Settlement spacing and settlement hierarchies	119	14.4 Confidence limits	148
11.9 What is the impact of recreation and tourist pressure?	121	14.5 Tests of significance	149
11.10 How do cities influence the rural areas around them?	127	15 Spatial analysis	153
11.11 The geography of fear	128	15.1 Analysis of point distributions	153
11.12 The geography of ill health	129	15.2 Index of dissimilarity	157
11.13 What are the goals and values of farmers?	130	15.3 The Lorenz curve and Gini coefficient	158
		15.4 Location quotient	159
12 Using the Internet	131	Part C: Presenting the information	160
12.1 Searching the Internet	131	16 Presentation and layout	160
12.2 Glossary: an A to Z of the Internet	131	16.1 Project structure	160
12.3 Useful Websites	132	16.2 General points to observe	161
Part B: Processing the information	133	Appendices	162
13 Cartography	133	A1 Random sampling numbers	162
13.1 Graphs	133	A2 Table of <i>z</i> -scores	163
13.2 Isoline maps	137	A3 Student's <i>t</i> -tables	163
13.3 Dot maps	137	A4 Critical values of Mann–Whitney <i>U</i>	164
13.4 Proportional symbols	139	A5 Critical values of chi-squared	166
13.5 Choropleth maps	140	A6 Useful addresses	167
		A7 Sources and further reading	170
		Index	171