

CONTENTS

Preface vii *Acknowledgments* x

Part One

The scope of maritime archaeology

- 1. Introducing maritime archaeology 3
- 1.1 General introduction and definitions 3
- 1.2 The development of maritime archaeology 10
- 1.3 Summary and prospectus 22
- 2 The constraints of work under water 24
- 2.1 The organisation of work under water 24
- 2.2 Some problems in work under water 36
- 2.3 The advantages of excavation under water 49
- 3 The contribution of current work under water 59
- 3.1 Mediterranean shipbuilding in classical times 59
- 3.2 Mediterranean trade in pre-classical and classical times 69
- 3.3 Early Mediterranean harbours 75
- 3.4 Ships of the early medieval period in north-west Europe 84
- 3.5 Post-medieval ship construction 91
- 3.6 The Spanish Armada, 1588 98
- 3.7 The expansion of Europe, sixteenth to nineteenth centuries 105
- 3.8 The annexation of the New World 111
- 3.9 Navigational instruments 118
- 4 The unrealised potential of maritime archaeology 127
- 4.1 Prehistoric craft 127
- 4.2 Medieval shipbuilding in north-west Europe 131
- 4.3 Shipbuilding in Asia 135
- 4.4 Inland craft 138
- 4.5 Pre-1500 trade outside the Mediterranean 141
- 4.6 Anchors and anchorages 146
- 4.7 Deep-water archaeology 149

Part Two

Towards a theory of maritime archaeology 155

- 5 The archaeology of shipwrecks 157
- 5.1 Introduction 157
- 5.2 Wreck-sites and their environments 160

Contents

5.3	Extracting filters	165
5.4	Scrambling devices A	
	The process of wrecking	169
5.5	Scrambling devices B	
	Sea-bed movement	175
5.6	The analysis of sea-bed distributions A	
	Continuous sites	182
5.7	The analysis of sea-bed distributions B	
	Discontinuous sites	196
6	The archaeology of ships	215
6.1	Introduction	215
6.2	The ship as a machine	216
6.3	The ship as an element in a military or economic system	219
6.4	The ship as a closed community	6.4
7	The archaeology of maritime cultures	226
7.1	Introduction	226
7.2	Nautical technology	230
7.3	Naval warfare and maritime trade	237
7.4	Shipboard societies	240
7.5	Incidental contributions to archaeology in general	242
7.6	Conclusions	246
8	Theory and practice	248
	Bibliography	255
	Index	268