Neanderthals and Modern Humans develops the theme of the close relationship between climate change, ecological change and biogeographical patterns in humans during the Pleistocene. In particular, it challenges the view that Modern Human ‘superiority’ caused the extinction of the Neanderthals between 40,000 and 30,000 years ago. Clive Finlayson shows that to understand human evolution, the spread of humankind across the world and the extinction of archaic populations we must start off from a theoretical evolutionary ecology base and incorporate the important wider biogeographic patterns, including the role of tropical and temperate refugia. His proposal is that Neanderthals became extinct because their world changed faster than they could cope with, and that their relationship with the arriving Modern Humans, where they met, was subtle.

Clive Finlayson is Director, Museums and Heritage in the Government of Gibraltar, based at the Gibraltar Museum. He is also Professor in the Department of Anthropology at the University of Toronto. His research interests include Quaternary human–environmental patterns, the biogeography of hominids, and changing environments and faunal patterns in the Quaternary of southern Europe.
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Neanderthals and Modern Humans
An Ecological and Evolutionary Perspective

CLIVE FINLAYSON
The Gibraltar Museum
and
The University of Toronto
To Geraldine and Stewart
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Preface

In 1848 a strange skull was discovered in Forbes’ Quarry, Gibraltar, close to where I live. A second skull found eight years later in the Neander Valley, near Dusseldorf in Germany, gave a new hominid its name – the Neanderthal. This name, and its relation to an individual that lived close to the edge of its range, led to over a century of perception of the Neanderthals as a brutish people of northern Europe who survived, through thick and thin, the cold of the ‘ice ages’ until they were supplanted by the newly arrived and intelligent Modern Humans.

The image is still one that many regard as close to reality. Yet, paradoxically, the Neanderthals were intelligent people of mild climates. They evolved across the northern shores of the Mediterranean Sea and eastwards towards the Black and Caspian Seas. They ventured north only during mild climatic episodes and the unstable, cold and arid climate of late Pleistocene Europe eventually gave them the blow that sent them on the road to extinction. The Modern Humans hovered in the periphery and took advantage of the situations left vacant by the Neanderthals. This book is an attempt to redress the balance of over a century of misunderstanding.
Acknowledgements

I am grateful to the publishers, and in particular Tracey Sanderson, for the opportunity to publish this book and for their support throughout. The ideas put forward in this book were conceived after many discussions with friends and colleagues over a number of years. I am particularly indebted to my wife, Geraldine Finlayson, for her insightful discussions, ideas and support throughout. The ecological approach followed in this book stems from many years working in bird ecology. The ecological discussions have been particularly intense and fruitful with my friend and colleague Darren Fa.

I first ventured into the field of human evolution in 1990 when I became involved in the Gibraltar Caves Project. Two of its co-directors, Chris Stringer and Andy Currant of the Natural History Museum in London, have had a lot to do with my involvement and participation in this exciting field. I have been especially welcomed into the archaeological side of this subject, and have learnt vast amounts in the field, from the friendship and knowledge of Paco Giles of the Museo de El Puerto Santa María. I have spent many good times discussing and learning about the Palaeolithic from him and his team, especially Antonio Santiago Pérez, José María Gutierrez López and Esperanza Mata Almonte. I am also deeply indebted to my good friend and colleague Joaquin Rodriguez-Vidal for the brilliant way in which he has made me understand the geomorphology of the karstic landscapes that the Neanderthals lived in.

During the last five years in particular I have benefited from discussions with many colleagues, particularly during the two Calpe conferences organised in Gibraltar in 1998 and 2001: Emiliano Aguirre, Juan Luis Arsuaga, Javier Baena Preysler, Nick Barton, Ofer Bar-Yosef, Jacques Blondel, Eudald Carbonell, Miguel Cortés, Francesco d’Errico, Yolanda Fernández Jalvo, Rob Foley, Clive Gamble, Paul Goldberg, Marta Lahr, Richard MacPhail, Paul Mellars, Marina Mosquera, Paul Pettitt, Marcia Ponce de León, Robert Sala, Larry Sawchuk, Olga Soffer, Gerardo Vega Toscano, Erik Trinkaus, Manuel Vaquero, Joao Zilhao, Christoph Zollikofer.