PREFACE

For twenty-five years human behavioral ecology (HBE) has provided a general conceptual framework for the analysis and interpretation of hunter-gatherer subsistence behavior in living and prehistoric societies. Similar micro-economic models have received preliminary application in the study of pastoral and agroecological adaptations. This volume is the first collection to consistently apply this framework to one of the most fundamental economic shifts in human history—the evolutionary transition from foraging to farming through processes of plant and animal domestication and the emergence of agriculture. The chapter authors use a variety of geographically dispersed case studies and analytical approaches, including subsistence choice optimization, central place foraging, discounting, risk minimization, and costly signaling theory. Their contributions are novel in presenting regionally comprehensive case studies that address the transition to agriculture from a consistent conceptual framework informed by neo-Darwinian theory.

The volume is presented as fourteen chapters, organized by their setting in the New and Old Worlds, respectively. Following an introductory chapter by Winterhalder and Kennett, Tucker presents an ethnographic analysis of Mikea foraging and farming. The rest of the papers are archaeological and cover cases located in: Eastern Kentucky (Gremillion), southeastern Arizona (Diehl and Waters), the Fremont (Barlow), the Pacific coast of southern Mexico

(Kennett, Voorhies, and Martorana), the neotropics (Piperno), the Andean Highlands (Aldenderfer), Valencia, Spain (McClure, Jochim, and Barton), Southern Arabia (McCorriston), New Guinea (Denham and Barton), and Oceania (Kennett, Anderson, Winterhalder). The last two chapters, by Smith and Bettinger, contain general commentaries on the application of HBE to the question of agricultural origins. In keeping with the exploratory nature of the volume, these chapters are eclectic in structure, part essay and part commentary, mixing discussion of relevant problems, approaches or applications not covered in the papers themselves, with the occasional dose of speculation. All of the papers of the volume are directed toward explaining the origin, spread and persistence of domesticates and food production, evolutionary gifts from our foraging ancestors.

We wish to thank the contributors to this volume for their perseverance through several editorial rounds. Blake Edgar, Scott Norton, Joanne Bowser, and the staff at the University of California Press have produced this book efficiently and effectively. The production of this volume also benefited greatly from the substantial and time-consuming copy editing by Sheryl Gerety—thank you.

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June 12, 2005