

CHAPTER ONE

Introduction

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In 1970, introducing his *Roman Farming*, K.D. White justly lamented the lack of attention being paid to Greco-Roman agriculture. Nearly fifty years later, he would presumably be quite pleased with how the field has developed. Beginning in the 1970s (and no doubt in part due to White's own work), there has been steady growth in the number of monographs and articles on aspects of Greek and Roman agriculture as well as new commentaries on, and translations of, the most important ancient texts. Furthermore, instead of a largely text-driven approach, ancient agricultural history now employs an array of archaeological evidence (e.g. botanical and faunal remains) and methodologies (e.g. field survey, isotopic analysis). Students of the agricultural history of ancient Italy, to cite one regional example, now have new editions, translations, and commentaries on the fundamental literary texts (e.g. Goujard 1975 for Cato's *De agricultura* and Heurgon 1978 for Varro's *Res rusticae*), monographs, edited volumes, and articles putting those writers' works and lives into the broader context of Republican history (e.g. Reay 2005 and many of the chapters in Becker and Terrenato 2012) and literature (e.g. Kronenberg 2009). Archaeologists have published the results of fields surveys, new excavations of rural sites (including exciting recent work on small, non-elite sites by the Roman Peasant Project, Ghisleni et al. 2011), a synthesis of the survey data (Launaro 2011), a catalog of the villas in central Italy (Marzano 2007), and important overviews (e.g. Forni and Marcone 2002). In the Greek world, archaeological survey in particular has spawned a generation of multidisciplinary studies on the interactions between landscape and people, between rural and urban (Halstead and Frederick 2000; Adam-Veleni, Poulaki, and Tzanavari 2003; Alcock and Cherry 2004; Bresson 2016).

What accounts for this astonishing development in what many outsiders probably regard as a fairly dry subject? Undoubtedly one cause is the increased interest in the ancient economy. Since ancient economies were overwhelmingly agricultural, the farming sector demands serious attention. Environmental and demographic research as well as growing interest in foodways have also prompted more work on rural life in antiquity. Efforts to better estimate the population of Roman Italy have led, for example, to interest in the land's carrying capacity and thus more attention to issues of agricultural yields (on modeling Roman production, see Goodchild 2013; for Seleukid Mesopotamia, see Jursa 2010). The need to take stock of all

these developments inspired us to develop this Companion, which we hope offers an entrée into a field now so rich in research as to be perhaps somewhat intimidating.

Structure of the Volume

The chapters in Part I of this volume examine fundamental aspects of the study of ancient agriculture: the roles of paleoethnobotany, zooarchaeology, and isotopic analysis as well as the plants and animals themselves. The chapters in Parts II through IV show some of the ways in which agriculture developed over the course of about four thousand years from the Neolithic to the Roman period. We asked the authors of these chapters to discuss their regions' sources (archaeological and textual); geography, climate, crops, and livestock as well as the agricultural calendar, tools and technology of cultivation, any major political, social and economic aspects of agriculture, and changes in the practice of farming during the period. (The reader will also find guides to further reading at the end of each chapter.) The greater attention paid to regional developments in the Ancient Near East and classical Mediterranean betray, of course, our training but also reflect our desire to help Classicists, Biblical scholars, and other students of the ancient world (broadly construed) understand the agricultural context of early Mediterranean societies. However, knowing the importance of comparative approaches, we have included chapters on ancient India and China. The concluding chapter, by an agricultural historian of the modern United States, is also offered in the hope of greater engagement with the broader field. As its author, Pamela Riney-Kehrberg, notes, "the agricultural world has not changed as much as we might think." Of course, we have not been able to include chapters on every period or region even of Greco-Roman antiquity (nor indeed every useful analytical approach). While we regret the omissions, they also made the project feasible.

The Trajectory of Ancient Agricultural History

We asked our contributors to note important ongoing debates and suggest avenues for future investigation in their areas. While different regions have different stories – both in terms of ancient agricultural developments and modern research trajectories (driven as much by warfare and politics as by academic trends) – similar comments appear across many chapters. In antiquity, changes in ancient agricultural practice often happened slowly, but, as Christophe Chandezon (this volume) puts it, "nothing was ever static." The biggest challenge to understanding this flux is now probably the mountains of data available to researchers, from literary, epigraphical and papyrological texts, and the results of field survey, to faunal and botanical evidence, as well as the insights offered by palynology, paleopathology, paleoclimatology, dendrochronology, and geology. Integrating all this material is no simple task, and we expect large, collaborative projects to become even more common in the future. There are also, of course, many specialized topics on which further research is needed. In certain areas, more study of particular tools, crops, art, or texts will improve our knowledge of local developments and practices. More excavations of smaller rural sites would be extremely helpful in most regions, and indeed this has been a common refrain throughout the studies collected here.

Six key developments are central to the recent and future development of ancient agricultural history. First, there is the continuing reevaluation of the fundamental ancient texts, particularly the agricultural writers. For the Roman world, one might note the work

of Thibodeau (2011) on Virgil or Henderson (2002) on Columella; for Greece that of Edwards (2004) on Hesiod and his world and Pomeroy (1994) on Xenophon; and for the Ancient Near East that of Wunsch (1999; 2000; 2003) on the archives of the Egibi family of Babylon and that of Pearce and Wunsch (2014) on the archives of the Judeans in Mesopotamia. Second, the field survey, vastly expanded in use since the 1970s and considerably refined in terms of methodology (though problems remain), is greatly enhancing our knowledge of the ancient countryside. Third, the scientific analysis of biological remains from excavations has enriched our understanding of both arable farming and animal husbandry though, as several of our contributors note, we need more systematic collection of a wider range of botanical, faunal, and environmental evidence. Fourth, the study of ancient forests and forest management holds great promise (see, e.g. discussion of Mediterranean deforestation in Harris 2013). As Robyn Veal notes (2017, 388), “[wood] ... was substantially part of the agricultural economy” and the remains of charred wood, if properly collected and analyzed, can tell us much. Fifth, agricultural historians of antiquity can profit from adopting a range of approaches from other fields of history. A number of our contributors suggest that we will profit by considering agriculture from an economic, religious, social, or gender perspective. Comparative history is also providing new insights into old problems. For example, Halstead’s *Two Oxen Ahead*, drawing on “first-hand observation of and interviews with residents of the Mediterranean countryside” (2014, x), has much to offer the historian of the premodern Mediterranean on a variety of agricultural topics. Haug (this volume) notes the value of Alan Mikhail’s environmental history of Ottoman Egypt “for historians of Egypt in any period.” Environmental histories with a *longue durée* approach also tend to foreground interesting continuities. Horden and Purcell’s *The Corrupting Sea* (2000) stands out in this regard, brimming as it is with important observations on ancient agriculture. Sixth, and finally, paleoclimatology is perhaps the most exciting new direction in the study of ancient agriculture. The reconstruction of ancient climates is beginning to clarify the conditions in which ancient farmers operated (for the Roman period see, e.g. Manning 2013). These avenues of research suggest that the field of ancient agricultural history has the potential to yield many more exciting developments in the near future.

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