BOOK REVIEW

Early Animal Domestication and its Cultural Context. Pam J. Crabtree, Douglas Campana, and Kathleen Ryan, editors. Philadelphia: MASCA Research Papers in Science and Archaeology, Special Supplement to Volume 6; The Museum of Applied Science Center for Archaeology, The University Museum of Archaeology and Anthropology, University of Pennsylvania, 1989. Pp. vii, 136. 54 figures; 19 tables; no index. \$32.00 U.S. (hardcover). ISSN 1048-5325.

This slim, well-edited volume is a collection of separate papers put together as a tribute to Dexter Perkins. Perkins (1927–1983) and his wife Patricia Daly were in the forefront of research on the origins and development of animal domestication in the Near East during the 1960s and 1970s.

A short biography of Perkins by R. Solecki and review of Perkins's scholarly contributions by Crabtree and Camparia introduce the book. The remaining seven papers are accounts of original zooarchaeological research, several of which deal with samples originally described by Perkins, and others relevant to the Near East or the topic of animal domestication. Three papers focus on analytical problems: the distribution of wild sheep in the Indus valley (R. Meadow); a reappraisal of a histological screening technique proposed by Perkins and his colleagues for the determination of domesticated status in animal bone (A. Gilbert); and an overview of the archaeology of horse riding (D. Anthony and D. Brown). The Gilbert paper, the longest in the book, reveals some of the development of zooarchaeology as a science. Patterns in bone thin sections had been interpreted as signs of domesticated status, but now appear to be diagenetic artifacts, a familiar disappointment to many who work on degraded archaeological samples. Patterns in the architecture of spongy bone may indeed indicate some difference in wild and domestic activity patterns, as Drew, Perkins, and Daly had suggested, but establishing a modern baseline for such changes has been prohibitively time consuming and expensive. This also is a familiar story to those working on the biological effects of human control of living animals.

The remaining papers focus of assemblages of animal bones in a regional context. The authors cover early animal domestication in India (P. Rissman); the middle and upper Paleolithic of the Zagros (B. Hesse); hunting in early village economies in Anatolia (G. Stein); and the colonization of northern Europe (P. Bogucki). Taken together, these papers show how vast an amount of site-specific data must be collected before interesting cultural patterns emerge. The collective weakness of these papers is the lack of coordination between analyses of animal remains and analyses of forage and crops, partly, but not wholly, because the latter data do not exist.

One of Perkins's accomplishments was his insistence on the place of zooarchaeology within the field of archaeology, rather than zoology as had previously been the tradition in the United States. Here, the authors deal with chronologies, cultural context, and artifact assemblages as they interpret patterns in animal bone assemblages. At the same time, they are expert (or collaborate with experts) in many physical sciences in addition to mammalian morphology and bone biology. The fruits of this approach are a reconstruction of animal use in the Near East which is deliberately focused upon human use of, and alteration of, the natural environment. This readable book is not comprehensive enough in coverage to be used as a basic reference for this region, but it is a showcase for research methodology and regional synthesis on an important problem and area.

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