

strategies. These practices, in turn, might be expected to inform us about the availability of game or the corresponding human population pressures placed upon the game resources in a site's catchment. In his study, Bar-Oz found that only the el-Wad assemblage showed significant deviation from the others as expressed in the greater proportions of small game, especially fast-moving species (e.g., hare). While he notes that this finding implies a broadening of diet during the Late Natufian, one might also infer that such a shift toward the greater exploitation of low-ranked resources points to resource stress, perhaps derived from declining resources and/or growth in the human population (Henry 1989).

In examining the notion of a broad-spectrum subsistence strategy, which is thought by many to be the key to human sedentism and ultimately the emergence of agriculture, Bar-Oz presents a nice historical review of the various ideas on the topic. After comparing the alternative ways in which dietary breadth can be assessed, he ultimately adopts the notion that "prey type" is the most accurate indicator of dietary breadth and that the greater representation of small game in the Natufian does reflect a broadening of diet. Relative to its impact upon Natufian settlement patterns, however, there is the question of the degree to which such a broadening of a diet, which was still largely dependent upon gazelle and fallow deer, would have contributed to sustaining permanent or semipermanent occupations. Perhaps a more likely explanation is that the greater representation of lower-ranked resources in Natufian than earlier zooarchaeological assemblages stemmed from the more intensive exploitation of site catchments, especially for animal proteins, because of the greater permanency of Natufian settlements. Moreover, one might argue that the reduction in settlement mobility was driven more by an emphasis upon wild cereal collection, which both required and sustained some level of sedentism, than by the incorporation of small game in the diet.

Another zooarchaeological issue receiving thorough discussion by Bar-Oz has to do with gazelle exploitation during the Levantine Epipalaeolithic. He presents an exhaustive review of evidence related to the preferential hunting or even herd management of gazelle, but his detailed demographic analyses produce ambiguous results.

This is a well-written, richly illustrated, and tightly organized volume. It provides a wealth of new zooarchaeological information on a crucial interval in the history of human economic development. Moreover, Bar-Oz places this new information within thorough reviews of the central, often debated issues linked to understanding Levantine Epipalaeolithic patterns of animal exploitation. Professionals and advanced students will benefit from the book.

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Archaeology of Sinai: The Ophir Expedition, by Itzhaq Beit-Arieh. Monograph Series, Number 21. Tel Aviv: Emery and Claire Yass Publications in Archaeology, Institute of Archaeology, Tel Aviv University, 2003. xvi + 452 pp., 248 figures, 4 maps. Cloth. \$65.00. [Distributed in North America by Eisenbrauns]

It is a rare (and wonderful) occurrence in the archaeology of the Levant to see the culmination of a long-term excavation or survey project and to see it finally make it into print. Our discipline in particular has suffered, perhaps more than other regions of the world, from the experience of unpublished or inadequately published archaeological research projects over the years. Thankfully, this trend is now changing, and the excavation and survey report represented by this volume by Itzhaq Beit-Arieh sets a very high standard in terms of what is possible in publishing a full and complete account of the data from a major research project. Of course this report, like many others now appearing, was a very long time in preparation, with 20 years elapsing between the end of the research and the final publication of the data. In the case of this volume, I would say that it was truly worth the wait.

The research upon which this volume is based was undertaken during the post-1967 Israeli occupation of the Sinai Peninsula following the 1967 war, which provided the first major opportunity for the exploration of *some* of the key regions of the Sinai Peninsula in the modern era. The partial coverage of the region is a key point here, since Beit-Arieh makes it clear that the research was not a full and complete survey of the entire peninsula, but represents research of "mainly the barren mountain region of south-central Sinai where 7 sites were excavated and many others surveyed" (p. 3). Beit-Arieh describes his research in the Sinai Desert, beginning in 1971, in the context of a land that was virtually "*tabula rasa*" (p. xv). This is not entirely correct, since other explorers since the 19th century had made periodic visits to this region and had reported on some of the larger and key sites, most of which, in some way or other, related to Egyptian influence in the Sinai since the late Predynastic period (e.g., Holland 1871; Petrie 1906;

Gardiner, Peet, and Černý 1955; Rothenberg 1970). What is clear, however, is the fact that this survey represents the first truly *systematic* effort at a large-scale and extensive survey of the archaeology of large portions of the region. Included in this are many prehistoric and small-scale sites, and for this reason alone this volume is a truly important and ground-breaking study.

The volume is extensively, almost lavishly illustrated and provides in its 450 pages over 250 figures and maps. These are a combination of very well-produced halftones of general views and aerial photographs of the region and sites; several vintage photographs of the participants and the project staff and photos of survey activities in progress; extremely well-produced and labeled maps as line drawings of individual sites; very clear and detailed photographs of both the physical location and also of the excavated features of many sites; and a full range of line drawings and photographs of a wide variety of the artifacts, with the majority focusing upon the flint and ceramic finds from the site. The artifact illustrations are particularly fine, and often include a combination of detailed line drawings and “cut-out” photographs of the same artifact for comparative purposes. In this respect, the volume follows a trend started in the 1980s in other volumes, but in the case of this volume, the line drawings juxtaposed with photos provide a very useful and well-executed addition to the full and complete illustration of the finds. It is exceptional to see this attention to detail paid to the illustration of artifacts on such a large scale, and the author must be commended for the comprehensive record he has produced in this volume. These illustrations make the report a rare and important resource for comparative studies of many of the categories of material illustrated.

The organization of the volume is fairly conventional. Following a short introduction to the history of the project and the research region in chapter 1 (p. 1), the volume is broken down into three main sections.

Part I details the excavations of the seven key sites excavated by the project in south-central Sinai. These include Nabi Salah, Sheikh Mukhsen, Sheikh ‘Awad, Watiya North, Wadi Umm Tumur, Feiran I, and “a Chalcolithic Site” (Survey site 1105, unnamed). Part I is composed of chapter 2, with detailed subsections that provide a prose description of each site, its dimensions, features, and contexts, followed by a description of the excavation of the key segments and features of each site. These descriptions provide a combination of close detail of features and some interpretation of the features. This approach is a very useful one, as it allows researchers access to the details while separating these details from the excavators’ views and interpretations. The subsections covering the seven key excavated sites are followed by individual chapters detailing specific categories of finds from these sites and the survey. Many of these chapters are presumably written solely by Beit-Arieh, although this is not explicitly stated in the text, while others are the work of specialists who have studied

a range of materials both organic and inorganic from the excavated sites and survey. Chapter 3 details the “Architecture of the Early Bronze Age II Sites” (p. 101); chapter 4, “Pottery” (p. 110); chapter 5, “Flint Tools,” which is divided between studies by David Gersht on the “Flint Assemblages from the Excavated Sites” (p.129) and by Steven Rosen and Avi Gopher, “Flint Tools from the Survey” (p. 184); chapter 6, “Copper Artifacts and Production” (p.196); chapter 7, “Stone Artifacts” (p. 209); chapter 8, “Personal Ornaments” (p. 229); chapter 9, “Mollusc Shells and Shell Beads,” Daniella E. Bar-Yosef Mayer (p. 229); chapter 10, the “Early Bronze Age Archaeozoological Remains,” Liora Kolska Horwitz (p. 242); chapter 11, “Archaeobotanical Remains,” Nili Lipshitz (p. 257); chapter 12, “¹⁴C Dating of Wood Samples,” Dror Segal and Israel Carmi (p. 263); and chapter 13, the “Petrography of Pottery from the Survey Sites,” Naomi Porat (p. 265).

Only slightly confusing is the fact that the report on flint from the survey is contained within Part I (instead of Part II). Additionally, slight amounts of material from the survey are also discussed in chapters 11 on archaeobotanical remains, and 12 on radiocarbon dating. The petrography report on ceramics (chapter 13) includes material from both the excavation and the survey.

Part II consists of a catalog of the archaeological survey undertaken in the vicinity of the excavated sites, along southern and coastal Sinai, as well as partial surveys of central Sinai and north-central Sinai (“in the area of ‘Ain el-Qudeirat,” p. 273). Beit-Arieh estimates the total survey area as 1700 km², in which 306 sites were recorded. The catalog in Part II contains entries for 288 of these sites but does not include the 7 excavated sites (examined earlier in Part I of the volume) or the 11 EB II sites in the vicinity of ‘Ain el-Qudeirat, published elsewhere (Beit-Arieh and Gophna 1976; 1981). Sites visited during the survey were subjected to a detailed study of the location and visible remains, with an emphasis on collection of finds for both dating and attribution of function. Each site was “plotted on the map, measured, drawn and photographed” (p. 273), and some sites were subjected to test excavations. In his analysis of this data, Beit-Arieh classifies the sites into six broad categories “based on assessment of structural remains, pottery and lithic finds” (p.273)—namely, dwelling, camping, hunting, work, burial, and cultic sites. Dwelling sites are further divided based on “configurational and functional characteristics” (p. 274), as well as on site size and number of rooms. Burials were classified into six main types based upon morphological characteristics. The sites are then dated according to finds into traditional time ranges, from the Aceramic Neolithic through the Mamluk period. A very large number of sites were not dated, due to either the paucity or absence of finds. Of those identified, a very large portion fall into the EB II. The survey catalog lists sites numerically, providing UTM reference coordinates, location, description, list of finds, and chronological period. Within the catalog, some sites are illustrated by photographs

or line drawings, showing location, site plan, or specific features. In addition, some sites include line drawings and photographs of specific artifacts, principally flint, ceramics, and ground stone tools. As survey catalogs go, the descriptions for each site are fairly brief, although some are more extended in length. The really useful aspect of the catalog is the way the illustrations and the photographs are integrated into the catalog, which is a very practical way of giving an immediate impression of the site, its location, and key finds.

Part III consists of an extremely brief section that draws some general conclusions from the survey and excavations, largely in terms of settlement patterns and cultural interrelations, and provides a list of references. Although useful in providing insight into Beit-Arieh's general view of the material from this research, it is almost a footnote to the volume.

Overall the volume is a very thorough examination of an area which had been, up to the research represented by this volume, only seen in terms of its relationship with Egypt and was largely ignored in the study of the archaeology of the Levant. Due in part to the pioneering efforts of Beit-Arieh (and Beno Rothenberg), this area is now much better understood and adds a great deal to our understanding of the more arid portions of the Levant. This is an important and key volume which most scholars of the Levant and adjacent regions will want to own. The clarity of the presentation and the ample illustrations make it an invaluable research tool for specialists and students alike.

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- This volume completes the final publication of Moshe Dothan's excavations at Ashdod between 1962 and 1969 by presenting the finds from Areas H and K from 1968 to 1969. The Ashdod excavations have been slowly published over almost 40 years in a collection of mismatched volumes whose organization baffles all but the most interested. *Ashdod I* (Dothan and Freedman 1967) reports on one season; *Ashdod II–III* (Dothan 1971) reports on two and a half seasons; and the remaining three volumes (Dothan and Porath 1982; 1993; volume reviewed here) cover the last three seasons, with each volume covering a different area of the tel. For the reader, this means that no single area or ancient period can be understood without reference to multiple volumes which may, in the end, not entirely agree with one another.
- None of these flaws should be placed at the feet of David Ben-Shlomo who has produced the most lavishly illustrated, coherently laid out volume of the series. The appearance of this volume in the Israel Antiquities Reports series (rather than in *Atiqot*) has opened the possibility of integrating photos, plans, and pottery drawings into the running text in ways that were not possible earlier in the Ashdod publications. These formatting possibilities are used to excellent effect by all of the contributing authors in this volume.
- The core of *Ashdod VI* is found in chapters 2 and 3. Chapter 2 is a stratigraphic summary, ably written by Amihai Mazar and David Ben-Shlomo. While debris layer methods were not used in the excavation, the architectural focus allowed for the construction of coherent plans. Further, the authors make sure to note contexts in which the ceramics should be able to provide a firm chronological anchor (however infrequent these occurrences may be). The plans in general are excellent, particularly for strata of the Iron I period.
- Chapter 3 is a description and analysis of the ceramics and other finds (stone, worked bone, metals) from the strata described in chapter 2. As Ben-Shlomo attempts to move beyond a mere description, however, he continually faces the limitations of the expedition's excavation methodology. Objects are often tied to loci which are as generic as "room" or "area" and which might include a meter or more of vertical accumulation. Despite this, Ben-Shlomo val-