

THE BIR UMM FAWAKHIR SURVEY PROJECT

CAROL MEYER

The Oriental Institute of the University of Chicago carried out an archaeological survey project in the Eastern Desert of Egypt at Bir Umm Fawakhir between January 11 and 23, 1992. The site lies about 5 km to the northeast of Wadi Hammamat, famous for its quarries and graffiti, or about halfway between the Nile and the coast of the Red Sea. The modern settlement at Bir Umm Fawakhir consists of a guard post, two tea houses, a few houses, and a mosque still under construction. The settlement lies in a fairly wide, flat, sandy area (ca. 7.5 sq. km) surrounded by jagged, precambrian mountains dissected by numerous wadis. In the mountainside on the west are a number of ancient gold mines, and at its foot are the wells, all-important in the desert. The main group of ancient ruins is situated in a long narrow wadi hidden from the road by a spur of hills. Other, smaller clusters of ruins nearby have not yet been investigated.

It is quite a remarkable experience to walk through the ancient settlement at Bir Umm Fawakhir. It consists of several hundred buildings strung out on either side of a sandy wadi bottom serving as the main street. The buildings are all dry stone masonry but are well enough preserved that doors, niches, benches, trash heaps, and other features are readily visible. Steep granite cliffs enclose the settlement as if walled. The best views in fact are those from the tops of the cliffs; then the irregular, independent character of the house units becomes clearer. Our expectation was that a map would make the site still more comprehensible, and mapping and documentation of the surface remains were our major goals. Bir Umm Fawakhir provides an opportunity to study an entire ancient community with or without excavation. Urgency to study this site now stems from the fact that it is being looted, from the increased traffic on the Red Sea road, and hence from visitors who can too easily tumble the dry stone masonry.

The team consisted of Dr. Carol Meyer, Director; Henry Cowherd, photographer; Lisa Heidorn, archaeologist; Abdel Regal A. Muhammad, Inspector; Muhammad Omar, geologist; and Terry Wilfong, Egyptologist. Thanks are due to Dr. William Sumner, Director of the Oriental Institute which funded the project; to Dr. Peter Dorman, Director of Chicago House which served as our base of operations; to Dr. Ahmed Moussa and Dr. Mutawiya Balboush of the Egyptian Antiquities Organization; to Amira Khattab of the American Research Center in Egypt; to Dr. Henri Riad; to Dr. Muhammad

Sughair, Director of Antiquities of Southern Egypt; and to Rabia Hamdan and the inspectorates at Qena and Quft.

No systematic archaeological survey or excavations had been carried out at Bir Umm Fawakhir prior to 1992, but the site is mentioned in quite a few travelers' accounts. Most of them note the gold mines, wells, hundreds of "Roman" huts, and parts of the site now lost, such as the Ptolemaic temple. One of the early visitors was Arthur E. P. Weigall, who published an excellent account in *Travels in the Upper Egyptian Deserts* (1909). He left the most complete description of the Ptolemaic temple as well as the only known copy of its inscriptions. Couyat (1910) called Bir Umm Fawakhir "une véritable ville," but his most interesting contribution was a report of a papyrus, now lost, and two statues found in the quarries. Battered, headless, and almost armless, they are nonetheless in a classical style and were identified by Couyat as a nude Apollo and a semi-draped Venus. In the wake of renewed mining activity in 1940 and 1941, Guéraud published sixty or so ostraca found in the mining debris along with ancient grinding stones, pottery vessels, lamps, beads, and a few coins. Paleographically dated to the late first and second centuries A.D., seven ostraca have Latin writing and the rest Greek. Almost all of them have to do with military personnel in the Eastern Desert, and usually with provisions sent or desired. Zitterkopf and Sidebotham (1989) in their detailed survey of the Coptos to Quseir route were the first, however, to publish a Byzantine date for the sherds and ancient settlement at Bir Umm Fawakhir.

The published accounts of the site are fragmentary and sometimes conflicting, and without good maps either of the region or of the site itself it is difficult to resolve the problems. Some parts of the site have been destroyed, such as the Ptolemaic temple, and others remain unpublished, such as the artifacts found at the same time as the ostraca. Perhaps most seriously, the main body of ruins was mistakenly called Roman for at least 150 years.

The misidentification may have been due partly to the difficulty of visiting the site, and partly to the long-held belief that the Byzantine presence in the desert was minimal or non-existent. Alexandria indeed dominated Egypt politically, economically, culturally, and religiously, but there are scattered references to Clysma (Suez), Antinoopolis, and Myos Hormos (north of Bir Umm Fawakhir), and the ancient port at Berenice to the south. In light of new evidence from sites such as Abu Sha'ar, Wadi Nakheil, Bir Umm Fawakhir, and what can be gleaned from old accounts concerning Berenice, the idea of Byzantine neglect of the Eastern Desert needs to be re-examined.

As part of the initial work, the project carried out a brief study of the local geology, which explains a great deal about the layout of Bir Umm Fawakhir and about its reasons for existence. The only resources are mineral; the site lies in the middle of a hyperarid desert where nothing larger than camel thorn

grows. The Fawakhir granite to the east is the aquifer; the water is carried in fine cracks in the rock until it meets the dense ultramafic rocks at the western end of the area, and the wells are in fact dug near the contact zone. The pinkish granite was quarried at one time, probably in the Roman period. Extensively worked gold mines follow the quartz veins in the Fawakhir granite. The main group of ruins lies in a narrow wadi eroded in the granite; the steep sides serve as a boundary and almost as a town wall. The site's southeastern end is defined by a high dike of tough felsite rock with a natural gate in it.

Pre-Byzantine remains at Bir Umm Fawakhir are limited. From the pharaonic period we have, perhaps, a few sherds and above all, the Turin Papyrus. The latter may be read as a map drawn up in the Twentieth Dynasty to show the bekhen-stone quarries in the Wadi Hammamat and the gold mines a little farther to the east at Bir Umm Fawakhir. Evidence for a Ptolemaic presence is limited to the now lost temple Ptolemy III Euergetes, though we have many travelers' descriptions of it. Our attempts to locate the site of the temple or any surviving blocks have not yet succeeded.

The Roman remains are actually rather sparse, but nonetheless we do have the watch tower over the western gap leading into Bir Umm Fawakhir, some sherds, a few bits of faience, graffiti, the granite quarries, and perhaps one wall remnant of a large building or way station. The graffiti number eleven in all, painted or carved in a cave behind the modern tea house. Two of the graffiti represent a lion and a ship, perhaps a merchant galley. One graffiti appears to be a quarry mark, three more are illegible, and one is a seven-line painted inscription in Epigraphic South Arabian, perhaps first-second century. The remaining four graffiti are all in Greek; three have names plus a good luck wish. The fourth and most elaborate graffiti is written in part cryptographically and reads "Longinus gives thanks to all the gods in this place," which suggests a pre-Christian date.

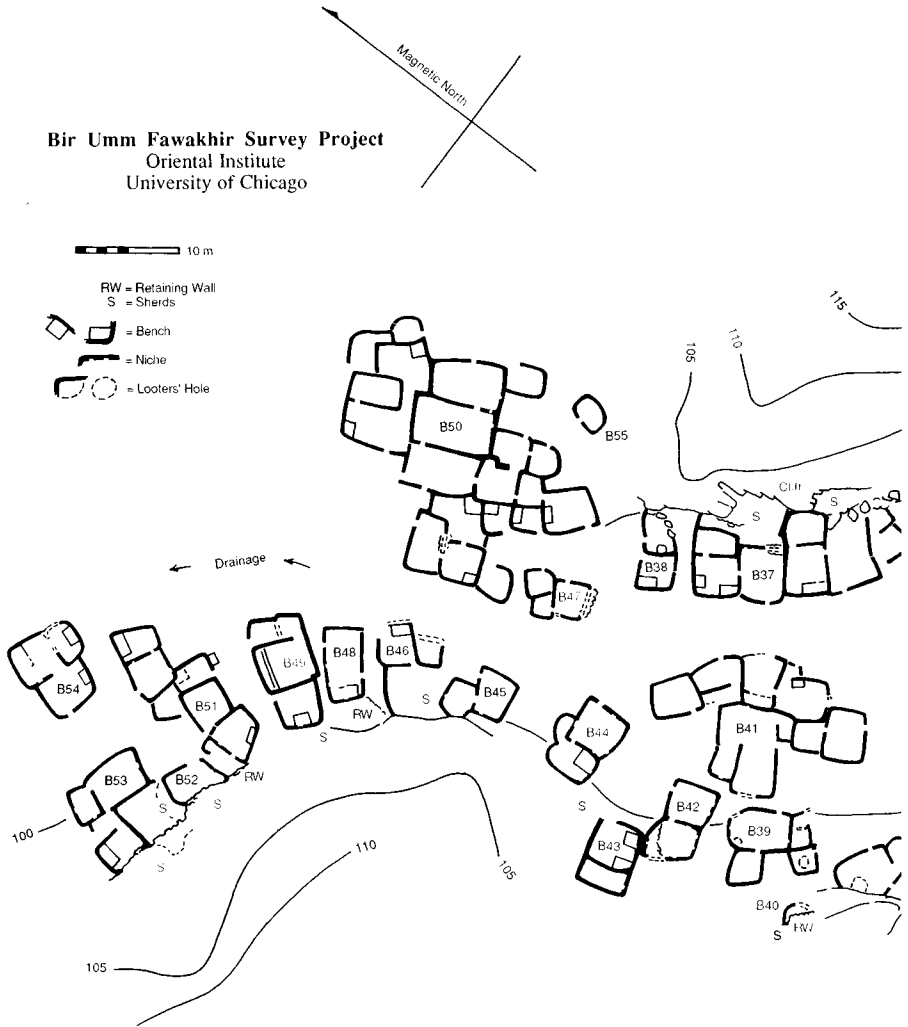
The goals of the Bir Umm Fawakhir Survey were to map the main group of ruins, to take a sample of surface pottery, and thus preserve at least some record of the site. With only twelve working days, we mapped fifty-five buildings and some of the topography, copied the graffiti, and took seven sherd collections. Mapping began at the southeastern end of the main wadi because a high felsite ridge there defines the eastern limit of the site and because the houses are better preserved (if looted) and easier to understand than the more ruined buildings closer to the modern road. The orientation off of magnetic north comes about because we followed the natural alignment of the settlement, strung out along its main street. In all, about one quarter of the buildings in the main wadi were plotted.

Turning to the map, we can see that the wadi bottom plus some small side branches are the main streets of the site, quite broad in places and narrow in others. Clearly there is no evidence of a classical town plan laid out on a grid system. The houses too are irregular, typically consisting of two or three rooms with one entrance from the street (e.g., B4, B24, B34, B42–B45 [B = building]). Two or more houses may be agglomerated into a larger unit (e.g., B3, B5, B37, B50). Scattered on the slopes behind the houses or in the empty spaces between them are a number of one-room outbuildings, either rounded or sub-rectangular in plan (e.g., B1, B2, B18, B36, B40, B55). What the function of the outbuildings may have been—storage, animal shelter, workshops, or latrines—we cannot yet ascertain. Thus, although we mapped fifty-five buildings, only sixteen to twenty-one are houses, ten or eleven are large, agglomerated houses, and the remaining twenty-two or twenty-three are outbuildings. The separateness of the houses and the lack of crowding are also noteworthy. When population estimates are made for the ancient community, this will have to be taken into account.

All of the buildings appear to have been built of dry stone, uncut masonry. There is as yet virtually no evidence of mortar or plastering. Most of the building stones are granite cobbles or felsite chunks filled and chinked with smaller stones and sometimes potsherds. Some of the buildings, such as B50, seem to have added on exterior one-room units, annexed a neighboring house, or blocked up a doorway, but apart from this there is not as much evidence of adding on and expanding as one might find in long-inhabited homes. This is one reason for suggesting that the community was fairly short-lived.

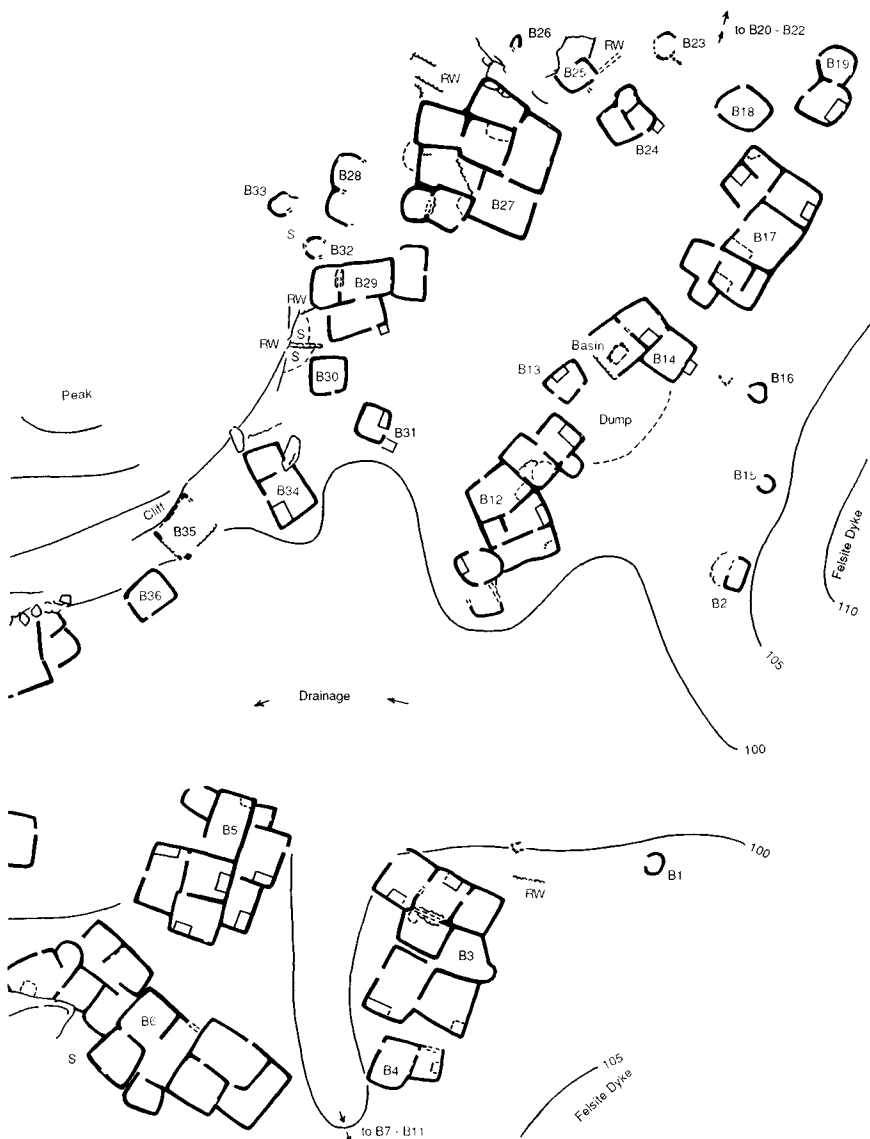
Enclosed courtyards or work areas are common features of most Middle Eastern architecture, but as yet few “rooms” can be identified as possible courtyards at Bir Umm Fawakhir. The only clues come from the circulation pattern, areas too large to be roofed easily, or perhaps from wider than usual doorways.

The houses are typically provided with wall niches for storage, though the number of niches varies widely, and in badly ruined walls the niches may of course be totally lost. Benches are another characteristic, built-in feature of the houses. They are generally made of a row of slabs set upright and apparently filled with sand and small stones. Several buildings have outside benches as well. Looters have consistently clawed into the interior benches and sometimes the shape of a looter’s hole is the only indication that a bench once existed there (cf. B17). Hearths are so far surprisingly uncommon, perhaps four noted to date, even though it gets cold in the desert during the winter. Fuel was probably scarce, and winds have blown away most of the surface ash, but nonetheless, we would expect more hearths. Building 14 has a stone-lined basin or trough of unknown function. The grinding stones and mortars found in



the houses may or may not pertain to domestic use; they are generally considered to be ore crushing stones reused as building material. In any case, only one crushing stone so far has been found in situ, a threshold block in B17.

The trash heaps, located immediately adjacent to each house or group of houses or else dumped up on the slopes behind them, are an opportunity to investigate deposition patterns of a specific house or group of houses without much, if any, of the reworking, pitting, clearance, or redeposition usual on long-lived sites. Sherds or other artifacts can with some security be attributed



to the closest house or houses, though more caution must be exercised with surface material.

We have no floors or remains of door panels or roofing material yet, and only two or three doubtful windows. Doors, at least those opening onto the streets, would presumably have been made of wood; at least one stone door socket is still visible. All of the niches have been labeled "niches" even when the thin back walls have fallen away so that the features now look like windows. The two most problematic cases are the window/door in B27 and the

two westernmost niches in B11; they do go through the wall and do seem more finished than the usual broken niches. Of roofs we have not a scrap. The rooms were presumably spanned by palm logs, stringers, and some sort of roofing material. It had to be solid enough to stand the *hamsin* winds, but not necessarily waterproof. Wood for doors, roofs, and anything else is valuable in the desert and was probably one of the first things stripped away.

What we do not have at Bir Umm Fawakhir is almost as interesting as what we do have. First and foremost there are no defenses, even though security was always a concern in the desert. A gold miners' camp would be rather tempting to raiders, as would a caravan marching to or from the Red Sea ports with trade goods. The Byzantine fort at Abu Sha'ar, also long identified as Roman, does have a defensive wall, towers, barracks, and a central building (*principia* or a church). Even most of the monasteries of the period had some defenses. None of the buildings mapped so far looks like a warehouse, and there must have been some facility for storing food and supplies. Almost everything had to be hauled from the Nile Valley, and hence there must have been some central point for loading and unloading, distributing, and storing goods, even if only temporarily. We do not know what a Byzantine administrative building in the desert may have looked like, but there must have been some sort of administration for a settlement of this size. Given the Byzantine government's direction (or misdirection) of its citizens' taxes and lives, not to mention producing gold mines, it may be assumed that some representative kept track of activities at Bir Umm Fawakhir. At the very least, we would expect ostraca. That at least some of the inhabitants of Bir Umm Fawakhir were Christians is indicated by bowls with stamped crosses, but we have not found a church. Animal lines or shelters are not in evidence, even though animals must have carried supplies to the inhabitants of Bir Umm Fawakhir. Camels, which do not need much shelter, probably bore most of the traffic, but a few donkeys, sheep, or goats might have been tended, as they are by the present-day bedouin. Some of the outbuildings might conceivably have sheltered animals, but this has not yet been demonstrated. A study of the bones from the trash heaps next to the houses could answer some of these questions. If baked bread were brought from the Nile Valley, it would have reached the hardtack stage by the time it got to the settlers, but it could have been done. Fuel for baking or heating would always have been at a premium, and as mentioned hearths are uncommon and ovens are totally undocumented so far. Mining tools also had to come from the Nile Valley, but there must have been an on-site smithy to resharpen and mend them. This facility, however, would most logically have been located near the mines, a part of the site much disrupted by modern activity.

Far and away the most abundant surface finds at Bir Umm Fawakhir are potsherds. In order not to spend the entire field season on sherds, we took a limited sample from seven areas, which will provide at least a preliminary working corpus. There are also some splintery bone fragments on some of the trash heaps or in the spoil from looters' holes. Other finds are meager, notably granite crushing or pounding stones, three glass sherds, a sandstone trough, a ceramic lamp fragment, and one mud brick.

One type of crushing stone consists of a heavy, lower stone and a smaller upper handstone for rubbing back and forth, though only the heavy, concave lower stones have been found so far. The other type of crushing stone is a rotary mill; both upper and lower stones have been recorded on site. Unfortunately, neither the date of the crushing stones—whether Ptolemaic, Roman, or Byzantine—nor the gold extraction techniques used in the Byzantine period have received much attention.

Again, what we do not have is interesting. There are as yet no textile fragments, no metal, and no wood fragments, though the latter two materials were probably scavenged almost immediately after abandonment of a building or the site.

The goals of the Bir Umm Fawakhir Survey were to document the surface remains of the site and thus preserve a record of it and to investigate more thoroughly the nature of the site, which to date has almost always been called Roman rather than Byzantine. In twelve days we succeeded in mapping approximately one quarter of the community in the main wadi, collected a sampling the sherds, and clarified some questions about the different periods of occupation. The geological study explains many features of the site, why it exists and why it is laid out the way it is.

We can begin to see the pattern of the ancient community with buildings strung along either side of the sandy wadi bottom. From the maze of walls and doors and rooms we can now discern three main kinds of buildings: a two- or three-room house, an agglomerated unit made up of two or more connected houses, and one-room outbuildings.

The rest of our conclusions, as is often the case in an archeological project, are more questions than answers. Who were these people and what was their relationship to the cities, towns, and capitals in the Nile Valley, and with contemporary sites in the Eastern Desert? What were their means of supply and support? What, in short, were they doing there? Of four possible reasons—the gold mines, granite quarries, caravan trade, or a military post—we consider the first the most likely, though this is now more a question to be explored than a final statement.
