9 THE WESTERN OASES

9.1 INTRODUCTION

The oases of Egypt's Western Desert reached a peak of importance and prosperity in the middle to late Roman period, after which all of them declined sharply. Until attempts in the last few decades to develop their agricultural economies as a 'New Valley', they were lightly populated and less extensively cultivated than in antiquity. One result of this history is a wealth of monuments from the Graeco-Roman period hardly matched in the rest of Egypt, coupled with a relative absence of pharaonic remains. With a few exceptions, in fact, there is little to be seen before the Persian period.

Four of the five major oases form a semicircular arc to the west. Because the Nile bends to the east in the latitude of Dakhla and Kharga, all of the oases are located at significant distances from the valley. The fifth oasis, Siwa, is a world apart, for much of its history more closely linked to Libya than to Egypt, and its population has never been predominantly Egyptian; even today much of it speaks a Berber dialect instead of or in addition to Arabic.

There are archaeological remains of the Ptolemaic period in these oases, but they are enormously outweighed by those of the Roman period. Written documentation of the oases is also mainly Roman. Administratively they were divided under the Romans into three parts: the Ammoniake, or Oasis of Ammon (Siwa), the Small Oasis (Bahariya), and the Great Oasis (Kharga and Dakhla). Whether Farafra was considered part of the Small Oasis or is simply never referred to in the documents is hard to say; it has only modest visible archaeological vestiges to indicate that it was occupied in this period. In the later Roman period, the Great Oasis was subdivided into three administrative units, the Hibite (Kharga), Mothite and Trimithite (both Dakhla). From documentary evidence it is clear that Dakhla was substantially more populous and wealthier than Kharga, but Kharga Oasis has more standing monuments visible today, mostly the product of the Roman security network.

The connections of the oases to Egypt in antiquity corresponded to a large degree with those today. Siwa's main lifeline was the route to Paraitonion (Marsa Matruh) on the coast, although it was also linked to the Small Oasis by a caravan route some 400 km long; from there one could reach the valley. The Small Oasis, today reached mainly by a road from Giza (in the ancient Memphite), was connected by roads to the Fayyum and to Oxyrhynchos, neither in use today. The part of the Great Oasis nearest the valley, Kharga, was linked to it by several roads. The most important of these

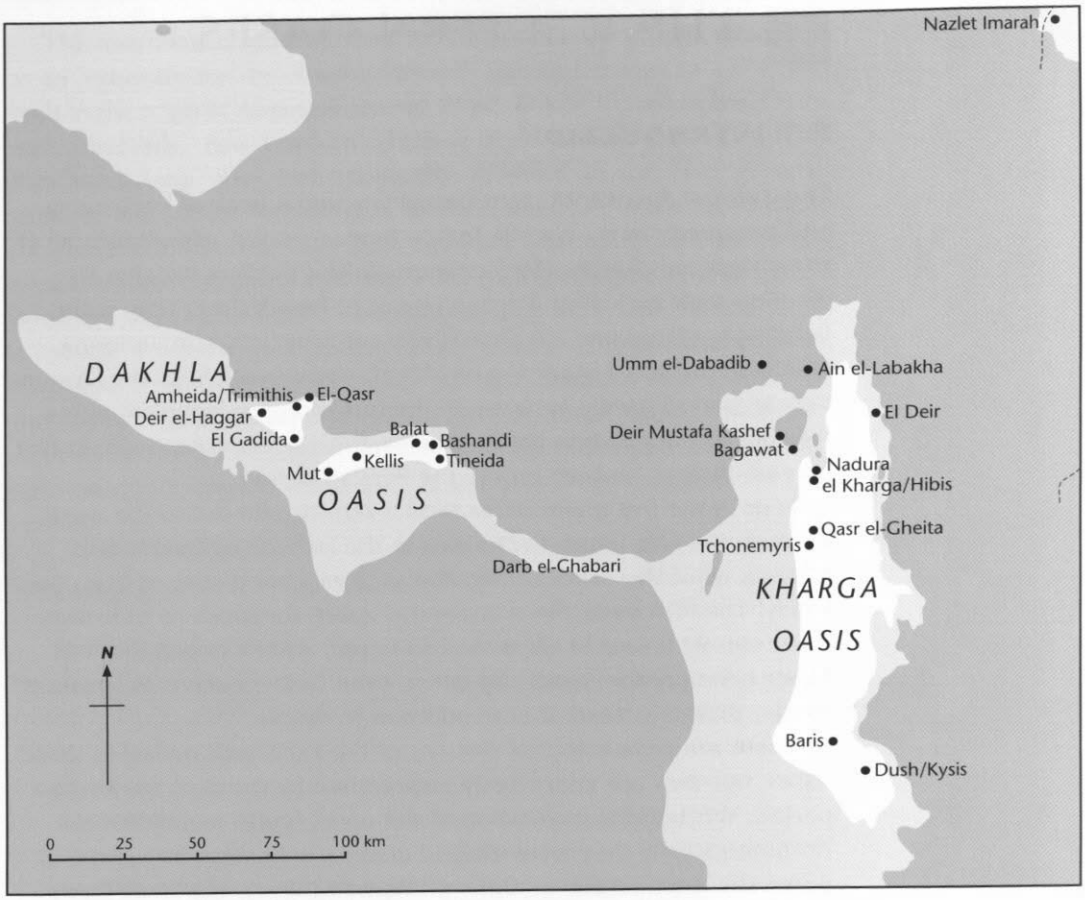


Fig. 9.1.1
Dakhla and Kharga oases.

connected the north of this oasis to Lykopolis (Asyut) and corresponds to the main modern route; almost as important, however, was a road that reached the valley in the northern Panopolite nome, near the Antaiopolite. The oases had close connections with this zone, attested in the papyri from Kellis. Because Kharga is so elongated from north to south, there were also routes connecting the southern part of the oasis, near Kysis, to several valley cities ranging from Hermonthis to Apollonopolis Magna.

Dakhla could be reached from Lykopolis by a direct route, but it is likely that most traffic to Dakhla went via Kharga because the intervals between sources of food and water were shorter. There were two links between the two parts of the Great Oasis, one along roughly the line of the modern road, the other further north, running across the Abu Tartur plateau by way of the spring at Ain Amour. The second of these is shorter and better supplied with water but steeper; the first longer and drier, but more level.

9.1.a Access

Good paved roads to Kharga and on to Dakhla from Asyut; to Bahariya from Giza; to Siwa from Marsa Matruh on the north coast road coming from Alexandria. Good roads connect Bahariya, Farafra, Dakhla and Kharga, but only a difficult four-wheel drive track between Bahariya and Siwa, not always open. Sites off the main modern roads sometimes require four-wheel drive for access. Relatively few sites in the oasis are officially open to visitors. The local inspectorate of the Supreme Council for Antiquities in the chief town of each oasis can advise on which sites may be visited and will provide an escort if necessary.

Bibliography: Jackson 2002; Vivian 2000; Wagner 1987.

9.2 KHARGA

Because little systematic archaeological survey has been carried out in the Kharga Oasis, the distribution of ancient settlement is known only very roughly. Kharga was less well endowed with accessible water than Dakhla. It seems to have been the introduction of *qanat* underground water channels to tap water sources that led to Kharga's first major development under the Persians, but it may have taken Roman water engineering – deep well digging – to produce the growth visible under the empire. Kharga is organized on a north-south axis about 160 km long, with a large area of desert separating the centre of the oasis (around Hibis) from the south (Kysis). The north of the oasis was well equipped with military posts along the road system; some of these had agricultural settlements as well. Many of the sites of Kharga have been known and described since the early nineteenth century but never fully recorded, let alone excavated.

9.2.a Ancient Hibis and its environs

The capital of the Great Oasis lay just on the northern edge of the modern town of Kharga, where the only museum of the Great Oasis is located, the **New Valley Museum**. The varied collection here includes material found in Kharga and Dakhla as well as some pharaonic antiquities transferred from the Egyptian Museum in Cairo. The most striking oasite finds are from the Old Kingdom governors' tombs at Balat (Dakhla), with offering stelae, alabaster and granite vessels and ostrich eggs. There is also a fine display of prehistoric stone tools. From the Graeco-Roman period come most of the remainder of the first-floor displays, including limestone lions from Deir el-Haggar, painted ibis and ram mummies from El-Muzawwaka, sarcophagi, masks, an inscribed stone panel and a painted wood statue of Horus from Ain Labakha, and the wooden codexes of Kellis. Some Late Antique textiles

and Coptic gravestones are displayed on the second floor along with a diverse collection of later material.

The most important visible monument of the city is the Temple of Amun-Re, usually called the **Hibis Temple**. The west part, with the essential elements of a temple, was built under Darius I; the large hypostyle hall and the porch came later, under Egyptian kings of the fourth century BC (Nektanebo I and II). Major repairs were already needed at this time because of subsidence of the ground, which caused large cracks. The larger, outer gateway was built under Ptolemy II. There are outer sections built in the late Ptolemaic and Roman periods, when two important edicts of prefects were inscribed. In Late Antiquity a church was built against the north side of the porch. To the south-east of the temple modest remains of the ancient city are visible.

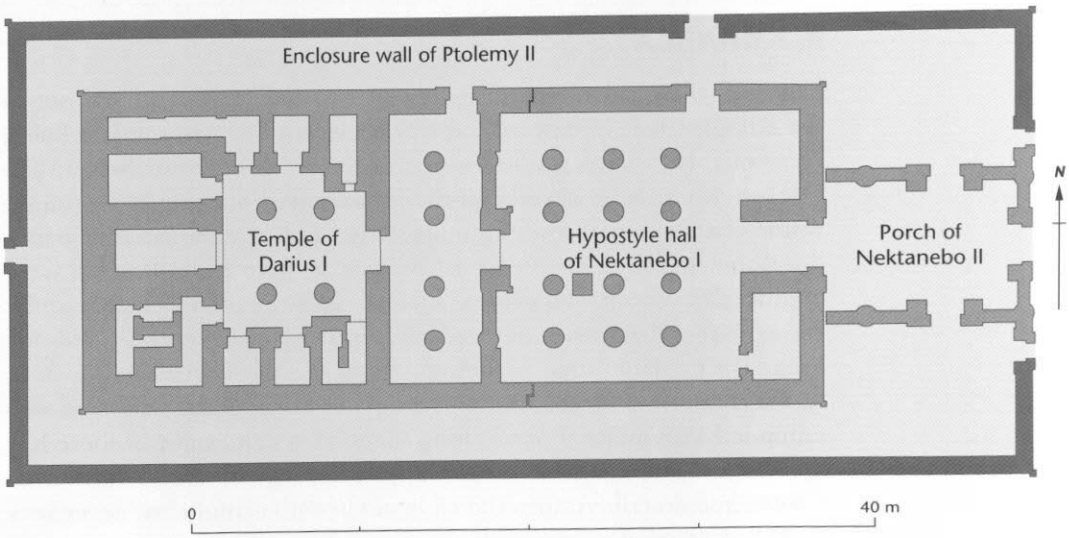


Fig. 9.2.1
Hibis Temple (after Winlock 1941: pl.XXXII).

Another temple, also apparently of Amun-Re, built of sandstone in the second century AD (dated by an inscription of Antoninus), stands on the hill now called **Nadura**, located east of the ancient city centre. It is surrounded by the mudbrick outer wall of the sanctuary, which may like other such temples have been recycled as a late Roman fort. The main entrance to the enclosure is on the east side, but it is not aligned with the temple axis. The north side of this gate preserves a bastion; there is a smaller entrance in the south enclosure wall. Inside the temple, remains of shallow reliefs can be seen. Nadura has views of the entire central part of the oasis, unobstructed to the east; it is a good point from which to see the relative position of other monuments in the area.

The zone north and north-west of Hibis, on and below the foothills of Gebel Teir, offers a rich array of Late Antique funerary, monastic and agricultural structures. The most notable of these is **Bagawat cemetery**, extending over an area some 500 x 200 m (col. pl. 9.2.2). Although it

has been claimed that it was in use as early as the second century, its public face is later, fourth to sixth (or even seventh) century, and entirely Christian. The numerous (263) tomb chapels are mostly simple domed or flat-roofed rooms, but there are ten major types, and some multi-room chapels are rather ambitious. Most or all were plastered and painted in antiquity, with considerable architectural ornament; almost all of this is now lost. Plaster and paintings survive inside some chapels; the Chapel of the Exodus and Chapel of Peace are the most noteworthy, both with biblical scenes (largely Old Testament) and with several abstract virtues and scenes of Paul and Thecla in the latter. In a high, central location stand the remains of a large basilica.

If one continues north-west around the foot of the hill beyond the entrance to Bagawat, one comes to further structures, both funerary and monastic. None has been scientifically published. The first, **Deir Mustafa Kashef**, is a high, multi-level mudbrick structure about 21 x 26 m, perched on the side of the hill looking west. Its core was a rock-cut tomb apparently turned into a shrine, perhaps for the monastery's founding father. At the upper level are the remains of a church. Below in the plain is an extensive complex which has been excavated. The ancient visitor entered through a series of passageways and rooms lined with benches, finally arriving in the large central room oriented north-south, of which much still stands. The walls are covered with Coptic graffiti. Off it opens a pair of small rooms oriented east-west, one clearly a chapel. Parts of the second floor survive, and there are extensive remains of domestic facilities.

North of these structures is the area called **Ain Zaaf**, which includes some hillside tombs in the same style as those of Bagawat and a sizable complex at the foot of the hill, larger than the building below Deir Mustafa Kashef. It has been largely re-covered by sand after excavation,

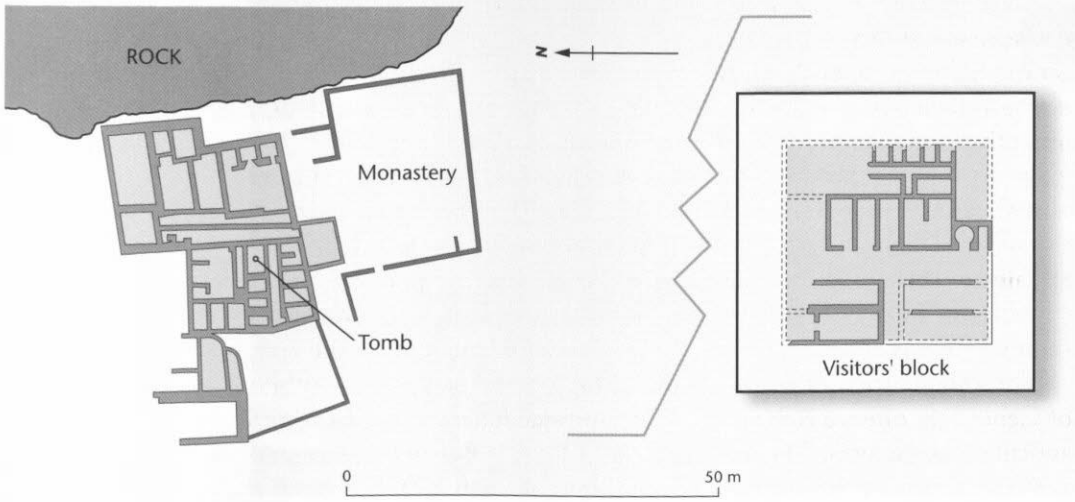


Fig. 9.2.3
Deir Mustafa Kashef (after Müller-Wiener 1963: 124).

but the ground plan is discernible. It has some visible graffiti on the plaster and may well have been another monastic centre.

The plain to the west of this area, now barren, was once under cultivation, and the remains of the irrigation system can be seen, along with a considerable sherd scatter. In it stand two ancient towers. The southern one, **Tahunet el-Hawa**, is 7 x 5 m and is preserved to a height of 11.5 m. The northern, **Borg el-Hammam**, is a bit larger but less well

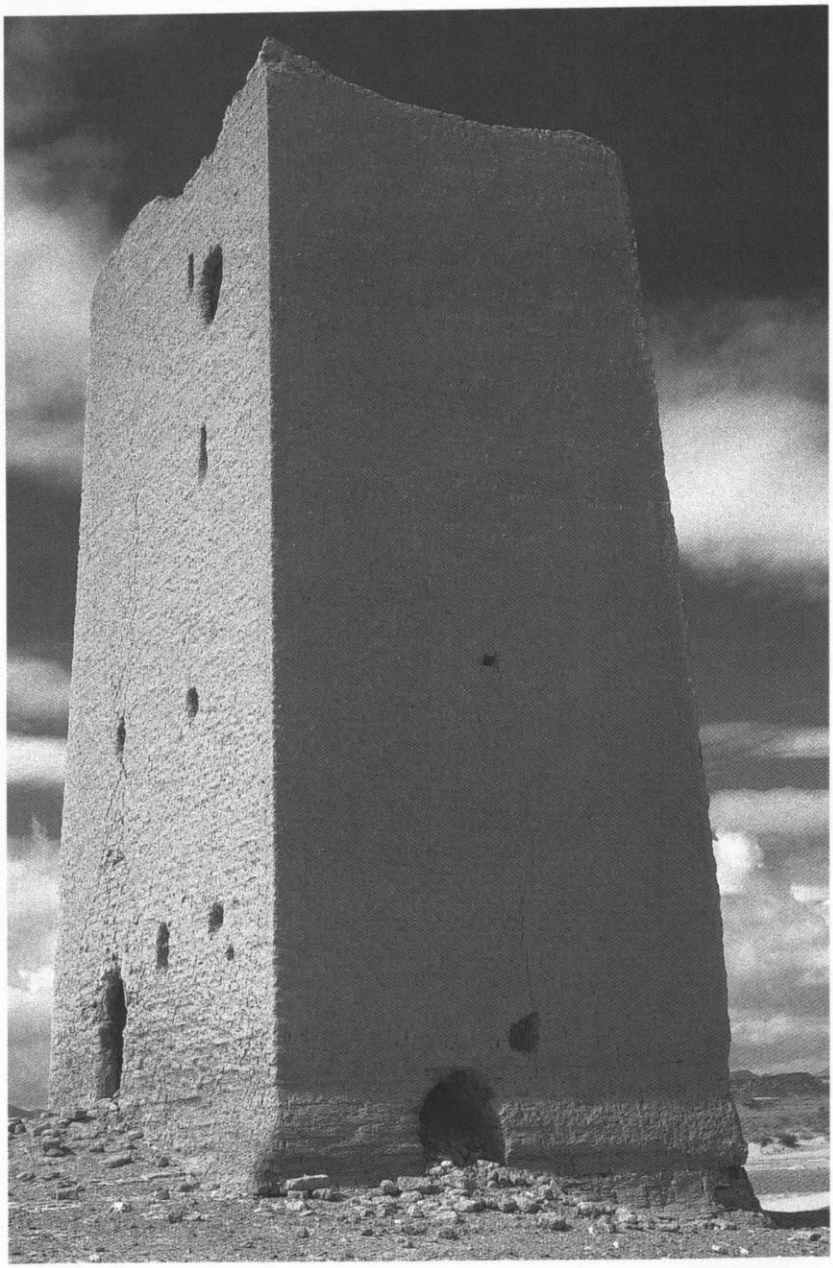


Fig. 9.2.4
Tahunet el-Hawa.

preserved in height. The latter has pigeon holes preserved on the upper level. Both of these were probably farm towers, providing storage, a pigeon house and perhaps a place of refuge. Similar buildings are known at Beleida and in the Dakhla Oasis.

About 3 km to the north-west of this area, to the south of Gebel Tarif, is a town site called **Beleida**, the visible remains at which, all of mudbrick, date to the Roman period. Excavations by the Egyptian authorities in the late 1980s cleared some of the buildings. They include twin temples side by side, each of three vaulted rooms, 25 m in length and together about 10.5 m in width. To the south-west of the temples is a large rectangular building with vaulted rooms and several stories, which has been identified, perhaps wrongly, as a fort. To the north-east is another, longer temple (33 m), of mudbrick but using sandstone in the sanctuary. About 1 km west of Beleida is a well-preserved pigeon house.

Bibliography: *Hibis*: Winlock 1941; *Nadura*: Naumann 1939: 10–13; *Bagawat*: Fakhry 1951; *Deir Mustafa Kashef*: Müller-Wiener 1963: 123–40; *Tabunet el-Hawa* and *Borg el-Hammam*: Gascou and Wagner 1979; *Beleida*: Wagner 1987: 172–3.

9.2.b North of Hibis

Just to the north of the ancient city, the road forked around the Gebel Teir, the low mountain oriented north-south that divides the northern part of the oasis. The west fork ran through the plain below Deir Mustafa Kashef and arrived eventually at Ain Labakha, where it joined an east-west road for Umm el-Dabadib, Ain Amour and Dakhla. The east fork split again almost immediately into a road headed north-east for El-Deir, the last post before setting out across the desert towards the Panopolite, and a road almost due north headed for Ain Tauleib, Someira, El-Gib, and eventually Lykopolis.

Ain Labakha was a substantial settlement, spread over an area of 1.5 x 2.5 km, standing at the base of the northern escarpment of the oasis. As the junction for the road from Kharga and that connecting to the Asyut road, Ain Labakha was a central node in controlling oasis traffic. French and Egyptian survey and excavations in recent years have made it much better known. Its most visible monument is the late Roman fort, about 17 metres square plus round corner towers and preserved in places to a height of 11.5 m. At least two earlier stages of construction can be identified even without full excavation. There is also one well-preserved mudbrick temple similar to that at Dush, and exploration of the site has uncovered two other temples, one going back to the Ptolemaic period. The most striking is a partly rock-cut **temple of Piyris**, the local god, with graffiti of the second and third centuries. There are also remains of the wells, *qanats* (one now partly cleaned and

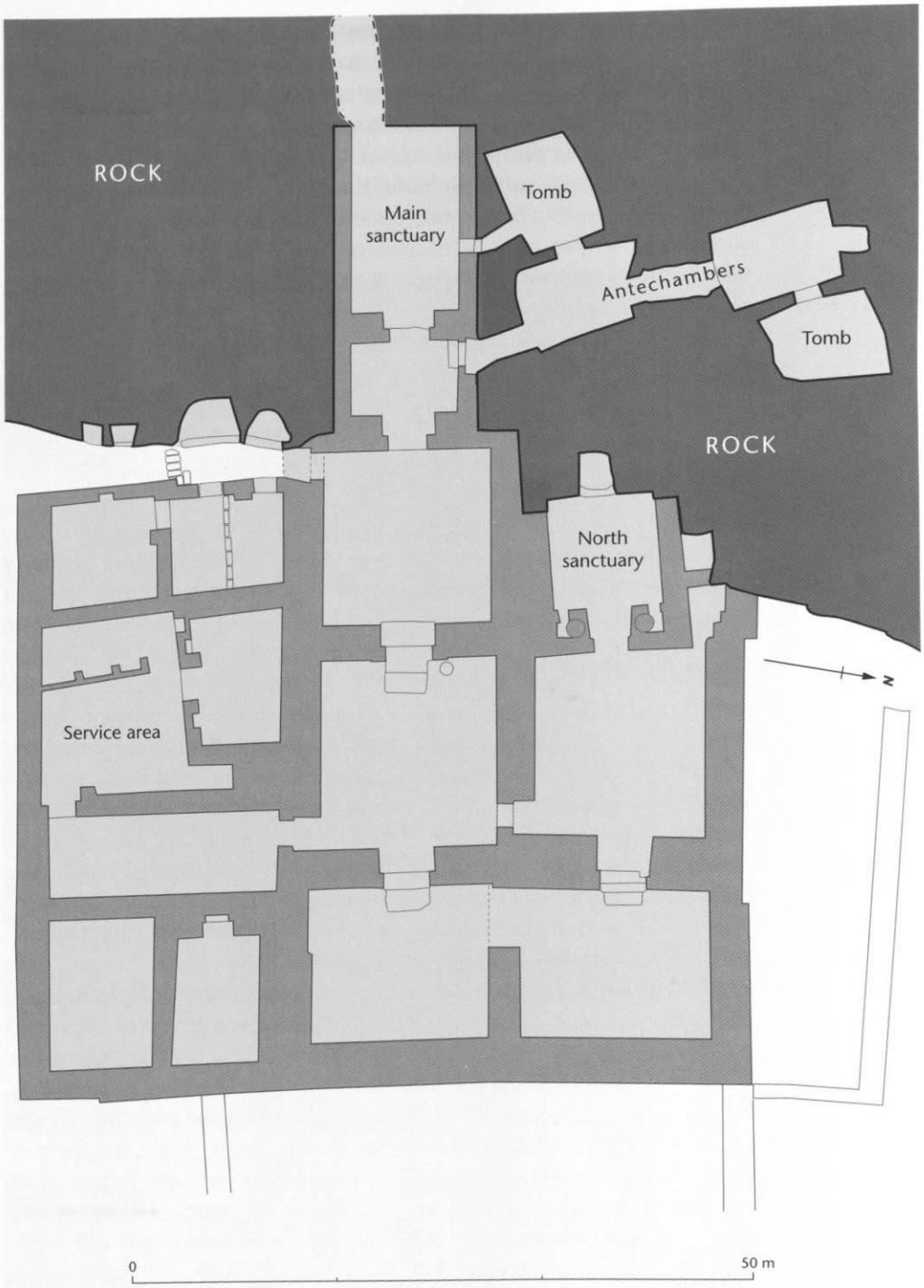

ROCK
Main sanctuary
Tomb
Antechambers
Tomb
ROCK
North sanctuary
Service area
N
0
50 m

Fig. 9.2.5
Piyris sanctuary
(after Hussein 2000).

restored to use), cultivation, and of the ancient village and its cemeteries, finds from which are in the New Valley Museum.

The road to Dakhla ran along the foot of the scarp, passing the north of the Gebel Tarif range and coming after about 12 km (a modern route takes about twice that distance, but this is not the best approach) to the most isolated of Kharga's sites, **Umm el-Dabadib**. Here also there is a late fort (col. pl. 9.2.6) and an extensive area of habitation. The sprawling earlier Roman settlement, with a temple, was located 0.5 km to the north of the fort, but in Late Antiquity the population was settled in a fortified hamlet tightly clustered around the fort. Both settlements are well preserved. The area was supplied with water by a system of at least five *qanats* running into the plain from the escarpment. These are now almost dry – a few trees are still thriving on the remnants of the water – but there was agriculture here as recently as the 1950s. The *qanats* are unusually well preserved. In the eastern hill is a necropolis.

Returning now to the road headed for the Panopolite, in the northeast of the oasis, at the foot of the scarp stands **El-Deir**, the largest military installation known from Roman Kharga, with a square ground

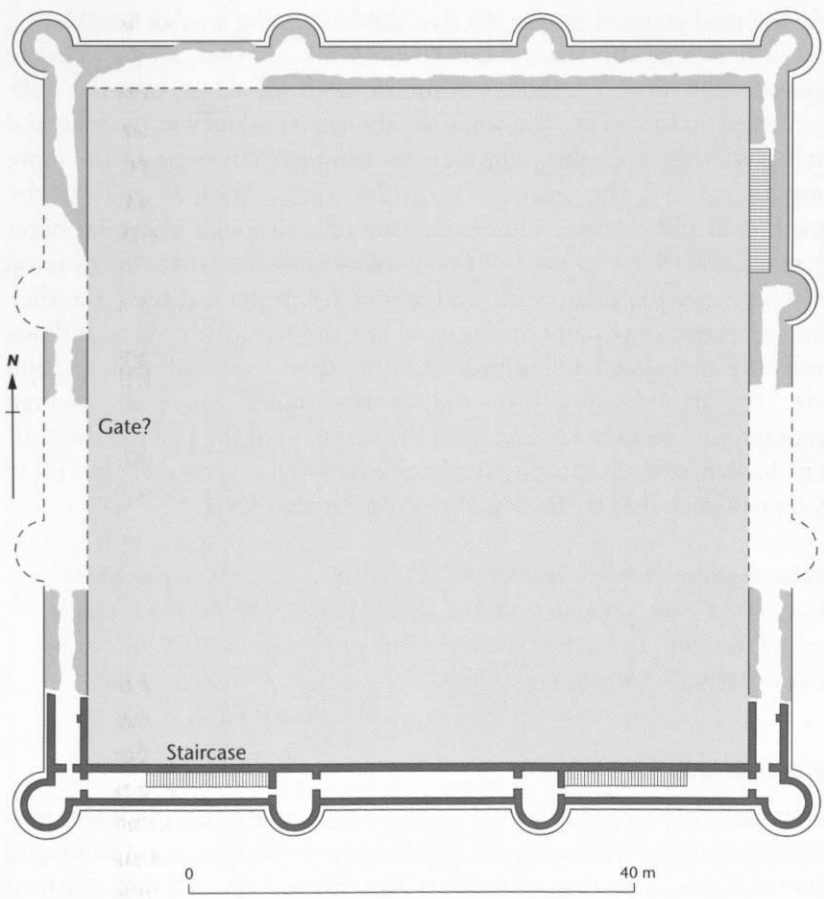


Fig. 9.2.7
El-Deir (after
Naumann 1939: 3).

plan of about 73 m on a side and a dozen towers, mostly still preserved to a height of about 12.5 m but badly damaged to windward (north); the walls were about 3.6 m thick. The ancient structures inside the walls have essentially disappeared; the scanty remains of cells that the visitor sees are modern. Unlike some of the other Roman military installations in the oasis, El-Deir was undoubtedly intended as a major fort, guarding one of the two important entrances to the oasis from the valley. A small mudbrick temple is preserved north of the fort, alongside an extensive field area showing remains of earlier cultivation, most likely an ancient area reused in modern times.

After the road to Umm el-Dabadib and Dakhla has diverged to the left and that to the valley via El-Deir has branched to the right, the ancient and modern road to Lykopolis continues to the north. There are several ancient sites, all of them no doubt part of the security system for the road, along the way. At about 20 km north of Hibis, on a road to Ain Labakha, is **Ain Tauleib**, the remains of a village with ovens and other indications of craft production. In the centre is a rectangular fort about 16 x 22 m, the mudbrick walls of which are preserved to a height of 10 m. On its west side are the remains of a stone gateway. This fort was probably the road junction for the track to Dakhla passing via Ain Labakha.

Further along this road, about 40 km north of Hibis, are two closely spaced small forts. The first is **Someira**, with sides 14 m and the walls preserved up to 7–8 m. The walls are about 50 cm thick at the base and half that at the top, thus considerably thinner than some of the more important forts. The entrance is on the south. Another 2 km to the north is **El Gib**, a more impressive structure although of similar outer dimensions (16.5 x 15 m), built on a rocky eminence that affords good visibility over the plain, with walls about 1.8 m thick at the base; they are well preserved except on the east. The site has little pottery and was probably an isolated defensive post rather than a substantial habitation site. The arched gateway on the south is intact. There is a vaulted underground passage leading from the fort toward the plain in the east. The fort's maximum capacity has been estimated at sixty men, but there is no evidence that it was actually staffed at that level.

Bibliography: *Ain Labakha*: Reddé 1999: 380, 390; Hussein 2000; *Umm el Dabadib*: Rossi 2000; *El-Deir*: Naumann 1939: 2–3; Reddé 1999: 379–80; *Ain Tauleib*: Gascou and Wagner 1979: 26; *Someira*: Gascou and Wagner 1979: 25–6; *El Gib*: Gascou and Wagner 1979: 22–5; Reddé 1999: 378–9.

9.2.c South of Hibis

The road south of Hibis is marked by several ancient sites before entering the long desert stretch that lies between the region of Hibis and that of Kysis. The first of these is **Ain Elwan**, about 5 km south of

Hibis. This was a village site, about 200 m in length, with farmhouses on the usual square plan with sides 7–10 m, pigeon houses and a larger rectangular structure (a small fort?) in ruinous condition. Another 2 km to the south, but largely covered by a dune at present, is **Qasr Baramuni**, with another small walled building and the remains of houses. A further 4 km to the south-east is yet another such site, **Qasr Nessima**, with a 10 x 15 m enclosure and a well-preserved pigeon house and the remains of a church.

At 20 km from Hibis is the most important site of this region, the sanctuary of **Qasr el-Ghueita**, the ancient Egyptian Per-ousekh mentioned in Theban tomb inscriptions as a source of fine wine. The temple was dedicated to Amun; begun under Darius I, it bears inscriptions of Ptolemy III, IV and X. It is thus one of the few oasis sites to have clear documentation of both Persian and Ptolemaic activity. The stone temple, partly reconstructed and offering fine reliefs, is surrounded by a large mudbrick wall and some remains of a small village. Like other such temples, it was apparently used for military purposes in Late Antiquity, and there are mudbrick structures from that period inside the temple.

The last point before the desert is the Ptolemaic temple of Qasr el-Zayyan, ancient **Tchonemyris**, long identified from a Greek inscription erected at the time of renovations under the prefect Avidius Heliodorus (AD 137–42). Its dedication is to Amun of Hibis (Amenebis) and associated gods. Substantial (partly restored) remains of the mudbrick enclosure wall and sandstone temple still stand.

Bibliography: *Ain Elwan*: Wagner 1987: 174; *Qasr Baramuni*: Wagner 1987: 175; *Qasr Nessima*: Wagner 1987: 175; *Qasr el-Ghueita*: Wagner 1987: 165–6; *Tchonemyris*: Wagner 1987: 166–7.

9.2.d The region of Kysis

In the Roman period the southern part of the Hibite nome was known as the toparchy of **Kysis**, after its chief village, today called Dush, located 105 km south of Hibis. Dush has been the object of survey and excavation by the French for more than a quarter of a century and is as a result the best-documented site of the Kharga Oasis. Kysis was set on a hill and was in late antiquity the crucial point controlling the road system at the southern edge of the oasis. To the north and north-east of the village was an extensive necropolis zone, where families of funeral workers plied their trade, and the remains of ancient wells and cultivation occupy considerable parts of the surrounding area.

The centre of the site is occupied by the sandstone temple of the Roman period (inscriptions from Domitian to Antoninus), adjacent to the mudbrick fortress that probably antedates it and remained in use at least until the late fourth century. The inside of the temple was reused

The funeral industry at Kysis

The funeral workers of Kysis are known from an archive of about fifty documents (AD 237–314). In some of them they give or sell parts of their monopoly rights to particular areas.

Aurelius Petosiris son of Petosiris, undertaker from the city of the Hibites, to Aurelius Petchon son of Tmarsis, from the village of Kysis, greetings. I acknowledge that I have granted to you by an inalienable and irrevocable gift, because of the loyalty you have shown to me, a fourth share of the funeral practice belonging to me in Kysis and the villages of Kysis, from now forever, and neither I nor anyone in my family may proceed against you concerning this gift, because I have so decided. This deed of gift, written in a single copy, is to be authoritative and secure as if deposited in a public registry, and on being asked the formal question, I assented.

The date and signatures of the donor, scribe, and witnesses follow (*P.Grenf.* II 68).

Box 9.2

in Late Antiquity. To the west is a second temple, built of mudbrick.

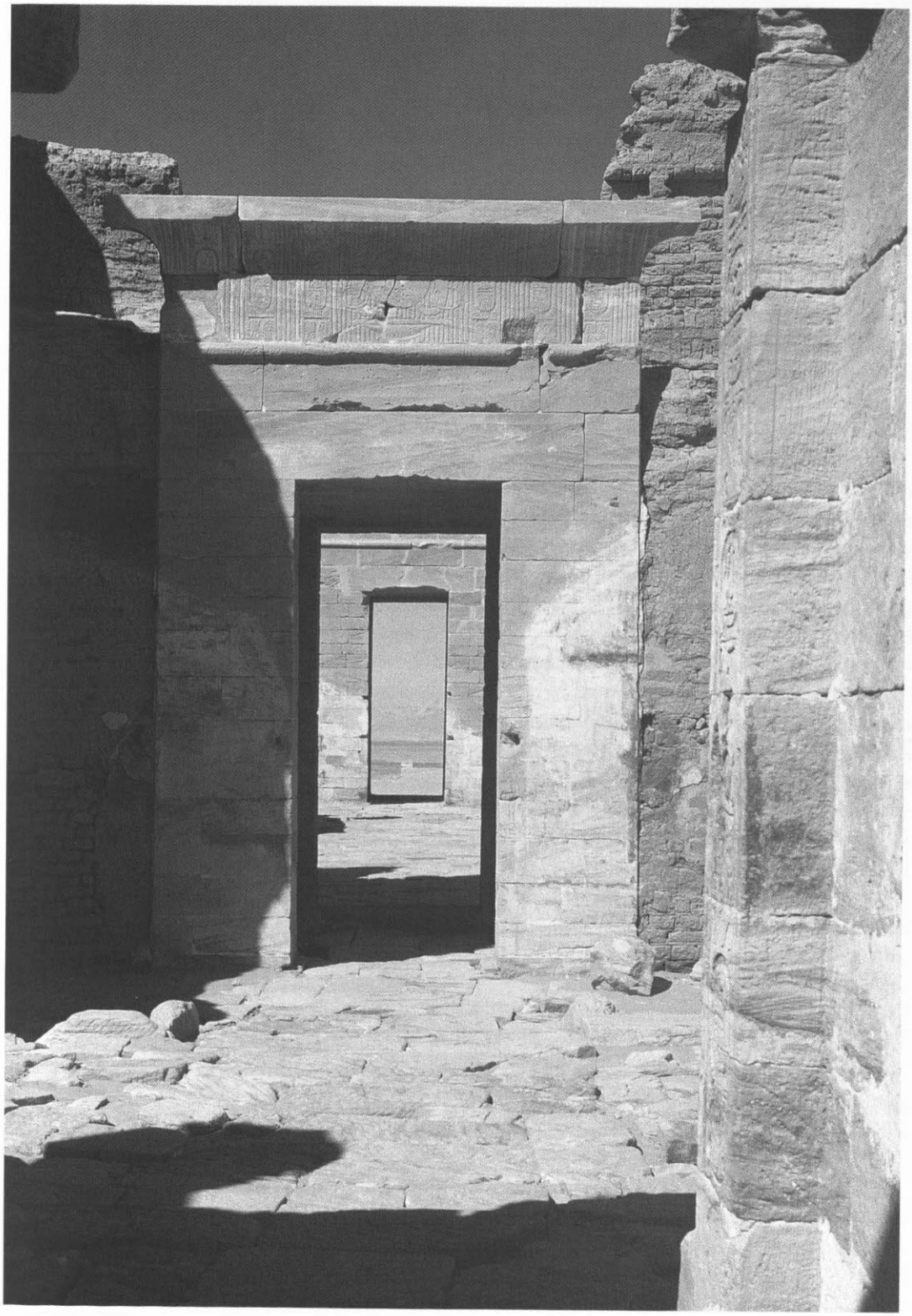
Some 4.5 km west of Kysis lies another hill with a substantial settlement, **Ain Manawir**. French exploration of the area since 1994 has brought to light an extensive system of *qanats*, the largest and best-preserved system of its kind. Thanks to the discovery of dated texts on ostraka it is known that the use of the *qanats* and the agricultural development of the area goes back to the middle of the fifth century BC, under Persian rule. The *qanats*, the water-distribution system and other ancient remains (a temple and houses of the Persian period, limited Ptolemaic traces and more extensive Roman habitation areas) lie on the north and east sides of the hill.

Kysis lay on one fork in the road system; from it a route led to the Nile Valley, connecting with the cities south of Thebes. That fork lay to the north of Kysis, near the modern village of Baris, and perhaps just to its north at the ancient site of **Mounesis** (modern Shams el-Din). This village site, some 200 x 200 m, preserves streets, houses, shops, workshops and a church; it was excavated by the French in 1976.

Bibliography: *Kysis*: Dunand 1992; *Ain Manawir*: Wuttmann 2001; *Mounesis*: Wagner 1987: 182–3.

SELECTED GPS READINGS		
Hibis Temple	N 25.28.59	E 30.33.53
Bagawat	N 25.28.96	E 30.33.29
Beleida	N 25.29.43	E 30.30.65
Umm el-Dabadib	N 25.43.80	E 30.25.33
El-Deir turn-off	N 25.36.82	E 30.38.87
Qasr el-Ghueita	N 25.17.28	E 30.33.57
Tchonemyris	N 25.15.05	E 30.34.28
Kysis	N 24.34.94	E 30.42.80

Fig. 9.2.8
Kysis, temple.



9.3 DAKHLA

9.3.a Introduction

Dakhla Oasis was substantially richer than Kharga in the Roman period. A papyrus of AD 368/9 shows the tax quota of Dakhla amounting to 63 per cent of the total for the Great Oasis. It was already richer in the Old Kingdom, it appears, with a major centre around Balat in the eastern part of the oasis and another at Ain el-Gezareen just south of Amheida in the western part. Available water has generally been much more plentiful, and the geology of Dakhla, unlike Kharga, is not suited to and does not require *qanat*s. The survey of the Dakhleh Oasis Project has identified more than fifty sites from the Old Kingdom. But apparently the water available to the technology of that period was soon exhausted here, as in Kharga, for there are hardly any sites from the Middle and New Kingdoms, and even the Ptolemaic period is not richly represented. In the Roman period there is an explosion of settlement: more than 200 sites of all sorts have been registered, and although the density of occupation seems to have slipped in Late Antiquity it remained at a high level by historical standards.

It is therefore all the more noteworthy that Dakhla has much less in the way of visible monuments of interest to the visitor than Kharga. In large part this deficit seems to be the result of a less obvious military presence in the area and a much simpler road system, with little of the complex integration into road networks in all directions – not only the valley but also the Darb el-Arbain desert route to the south – that marks Kharga. The striking, though usually small, forts characteristic of Kharga are absent in Dakhla. The army was, however, present; a Late Antique source reveals that a cavalry unit was stationed at Trimithis and a cohort at Mothis. Despite the superficial appearances, Dakhla is an exceptionally rich area for archaeology, with excellent preservation of organic materials and very large undamaged sites. It has in Kellis a village site of the Roman period that has yielded more exciting finds over the last fifteen years than any other comparable location in Egypt.

As in Kharga, there are areas in Dakhla that today are dry but in antiquity were cultivated. The overall shape of settlement, however, was probably not radically different. The largest extent of cultivation was the north-west, where Amheida became a separate city by Late Antiquity, disposing of a territory about three-quarters the size of that of Mothis (modern Mut); we do not know where their domains divided. Mothis certainly controlled the entire area to the east, including the central zone with the third major settlement of the oasis, Kellis, and the eastern zone around modern Balat, Bashendi and Tineida.

9.3.b North-west Dakhla

The area of **Amheida (Trimithis)** has been one of the major centres of Dakhla in all of the more flourishing periods of the oasis's history. The Old Kingdom site of Ain el-Gezareen, just 2 km south of Amheida, has a very large complex identified by the excavators as a temple. Amheida itself has surface pottery from many periods, although its surface appearance is late Roman. And the medieval to modern town of Qasr is just 4 km to the north, the capital of the oasis until the renewed growth of Mut displaced it in relatively recent times. Qasr's multi-storey houses are built of mudbrick but incorporate sandstone blocks reused from an ancient temple, most likely that of Amheida, along with the intricately carved wooden lintel blocks for which it is famous, some of them with dates (the earliest 1518).

Amheida itself is a large field of mounds, with a dense cover of Roman and late Roman pottery almost throughout. Around its edges, but mostly to the south, are the nearer cemeteries. The relentless north wind has sandblasted most of the above-ground remains, but a fair number of house walls still stand above ground level, and in many areas the plans of the houses can be seen easily from the small amount of wall projecting above the debris and sand. In some cases it is clear that what is visible at ground level is an upper storey, with at least one level entirely buried. Near the road is a curious pyramid, preserved to a considerable height, that serves as a visual marker for the site.

One of the three large Roman-period town sites of Dakhla, Amheida was ancient Trimithis, attested as a city in fourth-century documents found at Kellis; inscriptions on the wall paintings excavated at Amheida help to confirm this identification. No visible remains of any military camp have been found so far, although the *Notitia Dignitatum* identifies Trimithis as the base of the Ala Quadorum. Systematic exploration of the site by an American team began in 2001.

Just under 4 km to the west-northwest of Amheida is the necropolis of **El-Muzawwaka**, with hundreds of tombs cut into the sides of low hills. This cemetery probably served Amheida. There are important wall paintings in the tombs of Petubastis (probably first century) and Petosiris (somewhat later), including ceilings with zodiac designs; these combine Roman identity with traditional Egyptian funerary imagery. The cemetery goes back at least to the Ptolemaic period, as ostraka with Demotic texts from the later Ptolemaic period were found in a brick building about 150 m from the tombs.

About 6 km west of Amheida stands the temple of **Deir el-Haggar**, built in the second half of the first century (Nero to Domitian) of sandstone with mudbrick annexes and enclosure wall. It has been extensively restored (in the 1990s) and is now the most visited antiquity of Dakhla. There are reliefs on the gateways and the sanctuary, occasionally

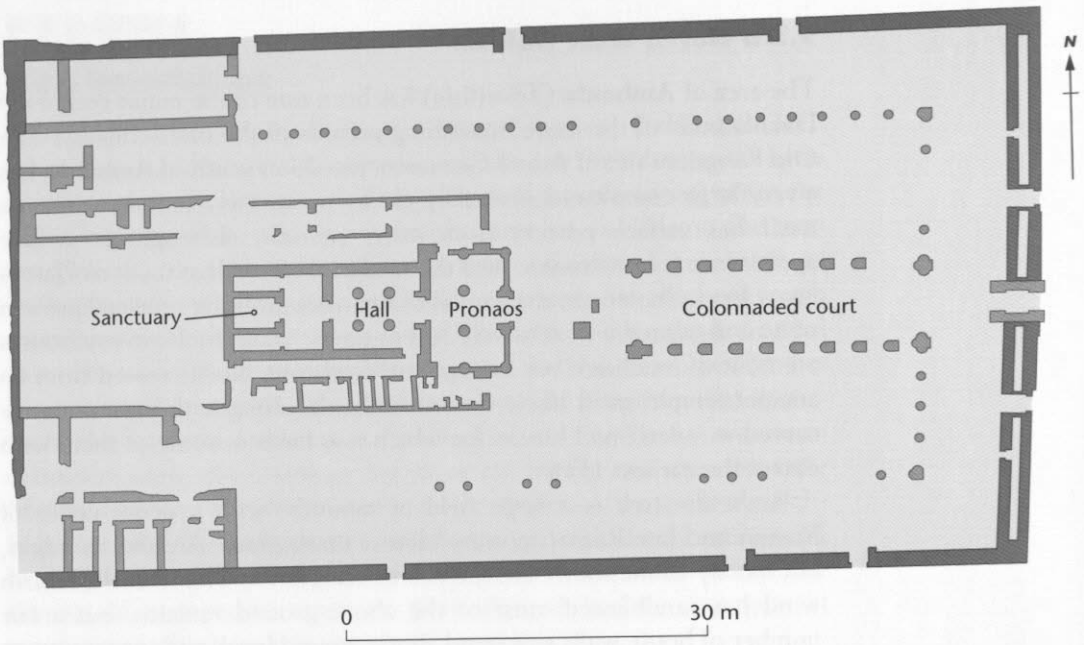


Fig. 9.3.1
Deir el-Haggar (after Mills 1999: 26).

with surviving paint, and interesting graffiti just inside the outer gate. It was dedicated to the Theban triad. In the area north and east of Amheida there are remains of more than a dozen **farmhouses** at several locations, of the Roman period (col. pl. 9.3.2). These typically consist of two levels, the upper one a pigeon house. Some are very well preserved, but none has been fully excavated.

Bibliography: *Deir el-Haggar*: Mills 1999; *El-Muzawwaka*: Whitehouse 1998; Osing 1982: 70–117; *Roman farmhouses*: Mills 1993; *Amheida*: www.learn.columbia.edu/amheida.

9.3.c Central Dakhla

The capital of the oasis today, and its largest city in antiquity, was **Mothis** (modern Mut). The remains of the ancient city are on the south-west side of the modern town and include the (pre-Hellenistic) temple, the remains of a massive wall, and a large ancient well. They had already a century ago suffered greatly both in extent and in condition, but excavations by an Australian team began in 2001.

North-east from Mothis lies the site of **Ain el-Gadida**, excavated by the SCA in 1993–5. This substantial mudbrick complex of buildings, dated by the excavator to the fourth-fifth century on the basis of the similarity of their finds to those from Kellis, contains largely domestic quarters, including cooking facilities. The several adjacent buildings total some 145 rooms. It has been suggested that it may have been a monastic settlement related to Kellis; such establishments are known

from the documents. But no specifically Christian material has come to light at this site so far.

Kellis (modern Ismant el-Kharab) was in the Roman period the central village of the portion of Dakhla to the east of Mothis and the third-largest settlement of Dakhla. It was probably the capital of a toparchy in the nome dependent on Mothis. In more than two decades of exploration by an Australian team, it has become the most productive Roman site in Egypt excavated in recent times. With remains covering an area of about 1 km x 650 m, it was a substantial settlement. The areas excavated to date include the main temple, the only standing temple dedicated to Tutu. Substantial remains of wall paintings have been found in this building, which goes back at least to the first century AD.

In the north part of the site is a Roman complex of 216 rooms, including a large peristyle courtyard, of unknown purpose; only part of this has been excavated. The building was reused for domestic purposes,

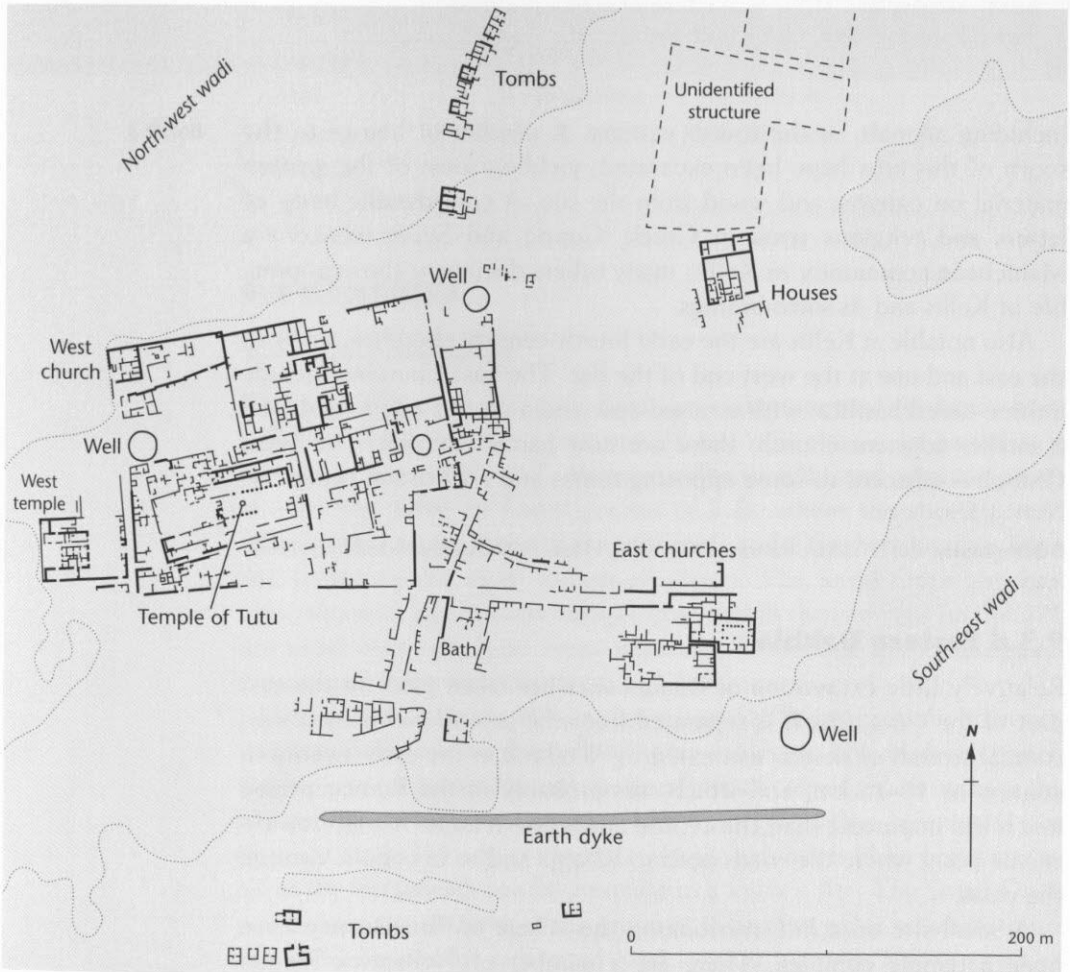


Fig. 9.3.3
The site of Kellis (after Knudstad and Frey 1999: 194–5).

Manichaeans at Kellis

The Coptic letters from Kellis are the largest body of Manichaean correspondence to survive from antiquity, with a mixture of religious feeling, elaborate personal expressions and practical concerns. Here is one letter probably from the 350s:

My brother, my master, the loved one of my soul and my spirit, the child of righteousness, the good limb of the Light Mind, the name which is sweet in my mouth, my beloved brother Hor. It is I, Horion, greetings in the Lord God. There is no measuring the joy that came to me when I received your letter; all the more, for I learned about your health. I brought . . . everything concerning my father. I have hurried writing to you of these two matters; while I greet your gentleness and your immutable, never-changing love. I have received the jar of oil from our son Raz. Look, I left it [with them] for the *agape*, as you said. You also write: 'Buy 6 matia of wheat.' I will buy them at 1200 to the artaba; thus 705 nummi for these 6 matia. I have also received the jlge (a cloth bag?) from our son Pateni (?). Look, I filled it and sent it by way of Raz. When you receive it, write to me. Do not bother (?) yourself about the agape. I will do it gladly. Yes, our brother Pakous is south of the ditch, harvesting. If he does not come by that day, I will send his share south to him. Greet warmly for me those who give you rest, the elect and the catechumens, each one by name. Greet our father Kele. Our son Aetios greets you warmly. Our mother Taese greets you and all who are in the house. Be well and live for a long time, my beloved brother, until we see one another again and my joy is complete.

(*P.Kell.* V Copt. 15)

Box 9.3

including animals, in the fourth century. A number of houses to the south of this area have been excavated, yielding most of the written material on papyrus and wood from the site. A considerable body of letters and religious texts in Greek, Coptic and Syriac concern a Manichean community in Kellis; many others document the economic life of Kellis and its surroundings.

Also notable at Kellis are the early fourth-century churches, a pair to the east and one at the west end of the site. The East Churches include a three-aisled basilica, with a raised apse and a row of side rooms, and a smaller adjacent church; these are now partly reburied. The West Church is adjacent to some imposing tombs and a Christian cemetery.

Bibliography: *Ain el-Gadida*: Bayumi 1998; *Kellis*: Hope 1999; Knudstad and Frey 1999.

9.3.d Eastern Dakhla

Relatively little excavation of Roman sites has taken place in the east part of the oasis, which is separated from the area of Kellis by a substantial stretch of desert, estimated by Winlock in the early twentieth century as 10–15 km, and which was probably in the Roman period much less important than the central and western zone. It was, however, the point where the roads both to Kharga and to Lykopolis entered the oasis.

A small site on a hill overlooking the village of Tineida may have been a temple complex. There are a number of Hellenistic-Roman

tombs in the village of **Bashendi**, the most famous of them the Tomb of Kitines (probably first–second century), with reliefs and inscriptions on the doorways along the east-west axis and in Room 2. The occupant's name was not Egyptian, unlike his father's, but it has not been securely identified, and it has been suggested that his mother's name was Libyan. This cemetery probably belonged to a village located in the plain to the east of the village, where a small brick temple and remains of domestic or agricultural buildings can be seen; the name of this ancient village is not known, and it has not been excavated.

Bibliography: *Bashendi tombs*: Osing 1982: 57–69; *Settlement near Bashendi*: Winlock 1936: 17–18.

SELECTED GPS READINGS		
Deir el-Haggar	N 25.39.93	E 28.48.75
El-Muzawwaka	N 25.40.84	E 28.50.31
Roman farmhouses	N 25.41.54	E 28.49.87
Amheida	N 25.40.12	E 28.52.50
Mut	N 25.29.69	E 28.58.80
Kellis	N 25.31.08	E 29.05.71
Bashendi	N 25.31.61	E 29.17.74

9.4 BAHARIYA

9.4.a Introduction

The Small Oasis of antiquity, Bahariya is documented in papyri from valley towns to a degree not true of any other oasis. In part this is because it was closely tied – economically, socially, and administratively – to the nome of Oxyrhynchos (6.2.d), where the shortest road (about 190 km) to the valley terminated, and Oxyrhynchos has been one of the richest of all sources of papyri. The Small Oasis also had close ties with the Fayyum villages from which the caravans on the 270 km road between these areas departed, Dionysias and Soknopaiou Nesos, and these too have produced documents.

Because few documents have been found in Bahariya itself, however, our knowledge of the Small Oasis is very uneven. The modern capital, Bawiti-Qasr, is generally and for good reason supposed to occupy the site of the ancient metropolis of the nome, Psobthis, but this is not directly proven by any evidence, and only one other place name attested in the documents can be attached to a known site. The Small Oasis was indeed the smallest of the group; it is hard to judge to what extent the 1954 figures for cultivated land – 1000 hectares (2500 acres) in

Bahariya, 8000 hectares (20,000 acres) in Kharga plus Dakhla – are proportionately in line with ancient realities, but they are suggestive. Bahariya today is divided into two parts separated by about 40 km of desert. Its southern pendant, the El-Heiz area, was certainly well developed in antiquity and must have formed part of the Small Oasis. Whether the intervening area was less barren than now is not clear. Nor is it evident whether Farafra was thought of as another southern dependency of the Small Oasis.

9.4.b Central Bahariya

For the most part, ancient Psobthis presumably lies under modern Qasr, the older part of the oasis capital. There are scattered remains of the ancient town visible, not least the numerous worked-stone blocks built into the walls of houses. Many of these probably come from the **Temple of Ammon and Herakles**, the location of which has been determined from parts of walls remaining in place and from epigraphical evidence. Its construction goes back to the reign of Amasis (Dynasty 26). Not far from it is the curious Roman arch, a multi-level structure that appears to have articulated the juncture between the higher area inside the town and the lower-lying garden zone outside it. Much of its superstructure was visible in the nineteenth century but has now disappeared.

At the other end of town, in Bawiti, part of an ancient **qanat system** (Ain el-Hubaga) can be seen, including the enormous open-spring basin at the head of the line of wells. This is located next to the offices and magazine of the SCA just off the main street.

One indicator of the size and importance of this metropolis is its cemeteries. Best known is the very large and undisturbed cemetery found during the past decade south-west of the city, now famous as the **'Valley of the Golden Mummies'** even though only a small fraction of the bodies found actually fit that description. The tombs excavated by the Egyptian authorities so far belong to the Roman period; these constitute, however, only a tiny sliver of the thousands estimated to have been buried here. The tombs are cut into the rocky plateau, and many of them are complex, multi-chambered structures with a number of bodies in each room, even stacked up like wood. The most interesting funerary monuments of Bahariya, however, go back to Dynasty 26; these include a whole series of large tombs around Bawiti, particularly at Ain el-Muftillah on the north-west side of the town. An underground gallery for the burial of sacred ibis birds at Qaret el-Faragi was in use down at least to the Ptolemaic period and perhaps the Roman. Ahmed Fakhry, the pioneer of oasis archaeology, listed a dozen 'most important' cemeteries around Qasr Bawiti, occupying all of the small hills around the town.

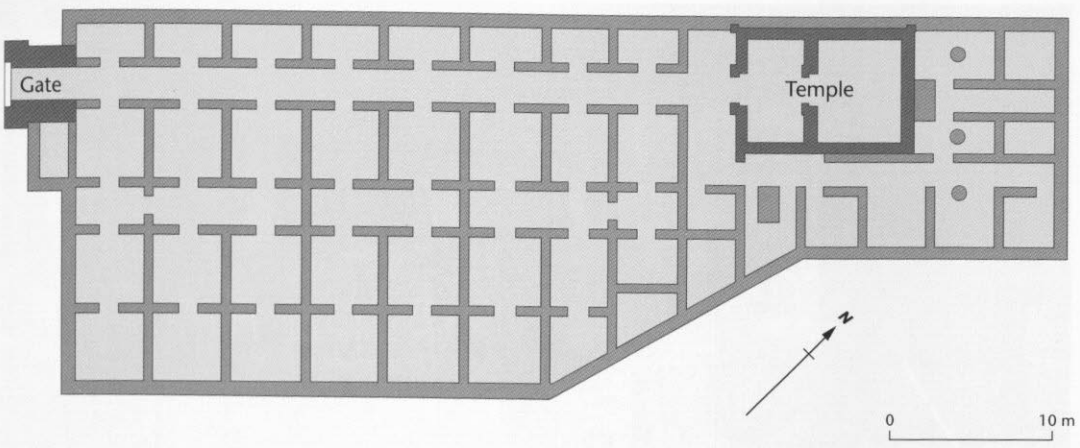


Fig. 9.4.1
The Temple of Alexander (after Fakhry 1974: 102).

Not far north-west of the cemetery, at el-Megysba, is the so-called **Temple of Alexander**, a curious structure with multiple periods of building. The core is a stone temple, the sanctuary of which has shallow reliefs which formerly contained the cartouche of Alexander, now ruined. The reliefs show the king sacrificing before Amun and other divinities. A considerable warren of mudbrick rooms has been built to one side of the main complex, and some of the original rooms have been subdivided. The location of the temple near the point where the track to Siwa leaves Bahariya has led to suggestions that the complex served as a *caravanserai*, but this seems unlikely, given its proximity to the city. Ostraka found here include an order addressed to a monk for him to pay an *artaba* of wheat to a soldier. It is thus possible that the building in its last phase was monastic or ecclesiastical, part of the village named Poka mentioned in an ostrakon.

About 9 km east of Bawiti is one of the more substantial Roman settlements of this oasis, **Qasr Muharib**. The main part of the site, about 110 x 170 m, consists of a number of mudbrick buildings, some preserved to the second storey, and one with some limestone elements (perhaps a temple). One building has been identified as a small fort. To the west a few hundred metres is a second area with sherd scatter and remains of walls, evidently the site described as Dinisah (from Arabic *kinisa*, 'church') by Fakhry.

Bibliography: *Temple of Ammon and Herakles*: Wagner 1974; *'Valley of the Golden Mummies'*: Hawass 2000; *Tombs of Dynasty 26*: Fakhry 1942; *Temple of Alexander*: Fakhry 1974: 99–102; Wagner 1987: 202–3; *Qasr Muharib*: Fakhry 1974: 106, 108.

9.4.c El-Heiz

The most important archaeological zone of the southern part of the Small Oasis is a somewhat dispersed cluster of late Roman remains

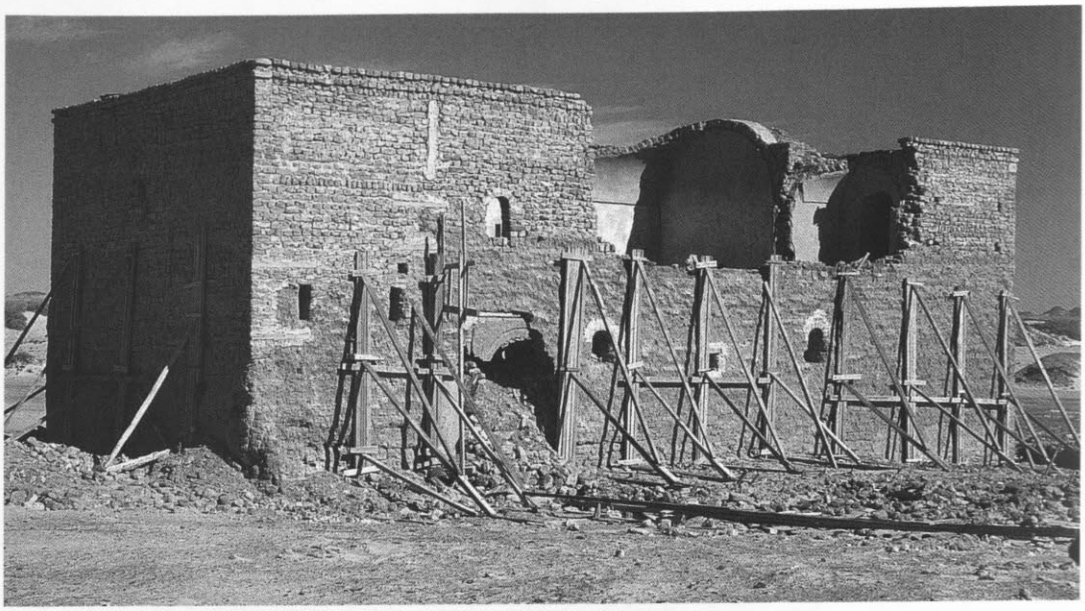


Fig. 9.4.2 Church of St George.

some 40 km south of Bawiti-Qasr, in a valley now uncultivated except for a few areas on the edges. There are no pre-Roman remains known so far, and the ancient name of the place is unknown. There is a small mudbrick fort, **Qasr Masuda**, poorly preserved particularly on the inside but probably the home of a modest detachment of Roman auxiliaries. Nearby is a very large and almost entirely unexcavated habitation site. One large building was described by Fakhry (who excavated there in 1945) as a 'mansion or palace'. Like the 'administrative building' at Ain el-Qurayshat in Siwa, it has a colonnaded hall with a raised dais. The site is, however, a large one, and Fakhry suggested that the sherd-covered mounds probably would reveal other such structures. Some 500 m away is the very substantial (about 10 x 20 m) **Church of St George**, so called because of a riding figure in wall paintings still visible to early travellers in the nineteenth century. It is a two-storey basilica in mudbrick, now in more ruinous condition than a half-century ago when Fakhry described it, and undergoing restoration. A staircase in the south-

SELECTED GPS READINGS		
Temple of Ammon and Herakles	N 28.21.26	E 28.51.50
Qanat in Bawiti	N 28.20.87	E 28.52.29
'Valley of the Golden Mummies'	N 28.19.79	E 28.49.53
Temple of Alexander	N 28.20.54	E 28.49.34
Qusur Muharib	N 28.20.78	E 28.58.47
Qasr Masuda	N 28.00.46	E 28.41.85
Church of St George	N 28.00.68	E 28.41.92

west corner, across from the entrance to the narthex, led to the balconies, as did a second staircase in the south-east corner. The interior had eight massive columns dividing the space into three aisles.

Bibliography: *Qasr Masuda*: Fakhry 1974: 115–24; *Church of St George*: Fakhry 1974: 114–19.

9.5 SIWA

9.5.a Introduction

The Ammoniac oasis, called Santariya by the early Arab writers, home of the celebrated oracle of Ammon, occupied a place in Egyptian history different from that of the other oases. Its remoteness is extreme. The modern road connection to Cairo via Bahariya is about 750 km, and even air distance to Memphis is about 560 km. Camel caravans took at least twelve days. The other approach, much more common both in antiquity and now, is along the coast from Alexandria to Paraitonion (modern Marsa Matruh) and then across the desert south-south-west to Siwa, each leg about 300 km by modern road and only a little less by ancient routes. The shortest crossing to a watered place was the eight days to Paraitonion, from which a ship could be taken to Alexandria. Siwa has over the centuries had abundant water sources nearer the surface than any of the other oases but generally poor drainage, leading to salinity.

Siwa's early ties were much more with Libya, and the sanctuary developed a close relationship with the archaic Greek settlements in Cyrenaica, from which craftsmen were brought for construction projects. The population was of an indigenous Berber stock, speaking a local language still in use today. Alexander the Great's famous visit to the oracle in early 331 BC is emblematic of its prestige in the classical Greek world, but there is little to suggest that the oasis was securely under the control of any outside power (even the Ptolemies) before the Roman period, and evidence from the Hellenistic period is scanty. With archaeological attention focused on the archaic and classical oracle sanctuary and its immediate surroundings, Roman Siwa was itself very little known until recently. Excavations have now begun to draw out a picture of Roman and late Roman oasis life, indicating that olives and olive oil were a major foundation of prosperity in that period – along with dates and salt, products of the oasis from early times.

9.5.b Around the centre

The famous **Oracle Temple of Aghurmi** (col. pl. 9.5.1), the Ammoneion, is perched high on a rocky hill, partly (and not entirely reassuringly)

Alexander the Great at Siwa

When Alexander had passed through the desert and was come to the place of the oracle, the prophet of Ammon gave him salutation from the god as from a father; whereupon Alexander asked him whether any of the murderers of his father had escaped him. To this the prophet answered by bidding him be more guarded in his speech, since his was not a mortal father. Alexander therefore changed the form of his question, and asked whether the murderers of Philip had all been punished; and then, regarding his own empire, he asked whether it was given to him to become lord and master of all mankind. The god gave him answer that this was given to him, and that Philip was fully avenged. Then Alexander made splendid offerings to the god and gave his priests large gifts of money. This is what most writers state regarding the oracular responses; but Alexander himself, in a letter to his mother, says that he received certain secret responses, which he would tell to her, and to her alone, on his return. And some say that the prophet, wishing to show his friendliness by addressing him with '*O paidion*', or 'O my son', in his foreign pronunciation ended the word with 's' instead of 'n', and said '*O paidios*', and that Alexander was pleased at the slip in pronunciation, and a story became current that the god had addressed him with '*O pai Dios*', or 'O son of Zeus'.

(Plutarch, *Life of Alexander*, 27; transl. B. Perrin, Loeb Classical Library)

Box 9.5

supported on ancient and modern substructures. The independent local Libyan princes also had their residence on the hill. Around it is an Islamic-period mudbrick village, no longer inhabited, with a mosque. The temple was built by a Greek workforce, probably from Cyrene, and for the most part goes back to pre-Hellenistic times. Although the god Amun is Egyptian, the cult at Siwa was partly Libyan and the god is referred to in Greek sources by the Cyrenaean form of his name, Ammon. Its great fame belongs to the classical period, when it was ranked with Delphi and Dodona, and to Alexander's visit, on which his claims to divinity were later said to have been founded. There is hardly any evidence for its continued importance in the Hellenistic period, and Strabo reports that in the time of Augustus it was almost abandoned.

The processional way of ancient times led from the front of the Oracle Temple down the south side of the hill and across a plain. Small bits of this *dromos*, used for oracular processions, have been uncovered; it was made of massive stone blocks and was undoubtedly very impressive. It led 400 m south to the contra-temple at **Umm Ubayda**, today a mass of stone blocks lying askew, full of robbed-out areas. Excavators have concluded that unlike the Oracle Temple it was built by Egyptians, with its nucleus going back to Nektanebo II and additions in the Hellenistic and Roman periods. A third temple, only partly excavated, has been found just south-west of the *dromos*; it is also built of large limestone ashlar masonry and is aligned to the *dromos*. Greek mason's marks have been found on some of the blocks. Down a path from Umm Ubayda lies a large circular pool fed by springs, the

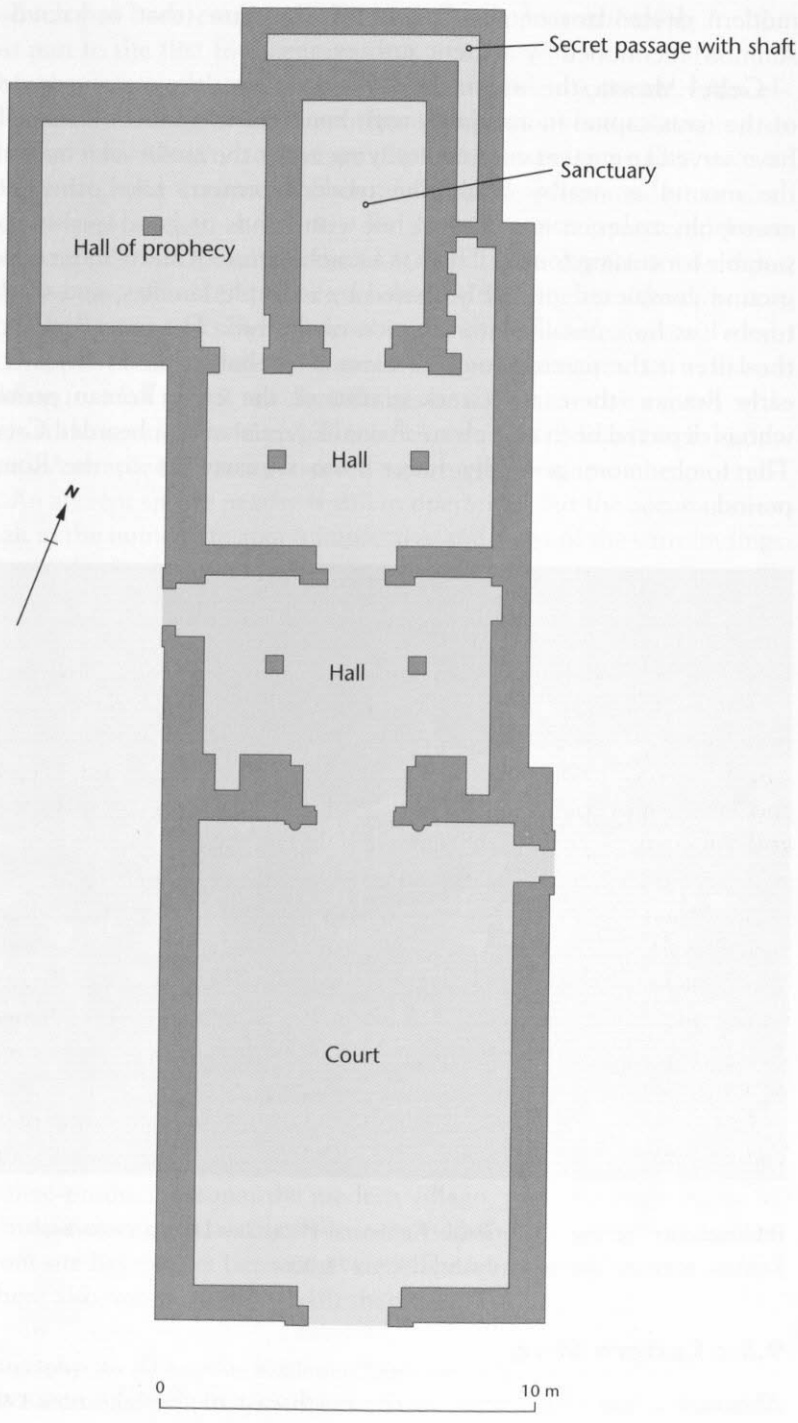


Fig. 9.5.2
Siwa, the Oracle Temple (after Kuhlmann 1988: 16).

modern descendant of the **Spring of the Sun** (that is, sacred to Ammon) mentioned by ancient authors.

Gebel Mawta, the 'mountain of the dead', was the main necropolis of the oasis capital in antiquity, with hundreds of tombs. (It may also have served an ancient community lying under the medieval remains on the mound at nearby Shali, the modern centre.) Like other such necropolis zones, it is a conical hill with bands of good-quality rock suitable for cutting tombs. There is a combination of multi-room underground complexes, probably shared by multiple families, and smaller tombs cut horizontally into the side of the hill. The most famous of the latter is the painted tomb of Siamun, probably late Hellenistic or early Roman (there are Greek graffiti of the early Roman period), who is depicted both as a clean-shaven Egyptian and a bearded Greek. The tombs more generally range from Dynasty 26 to the Roman period.

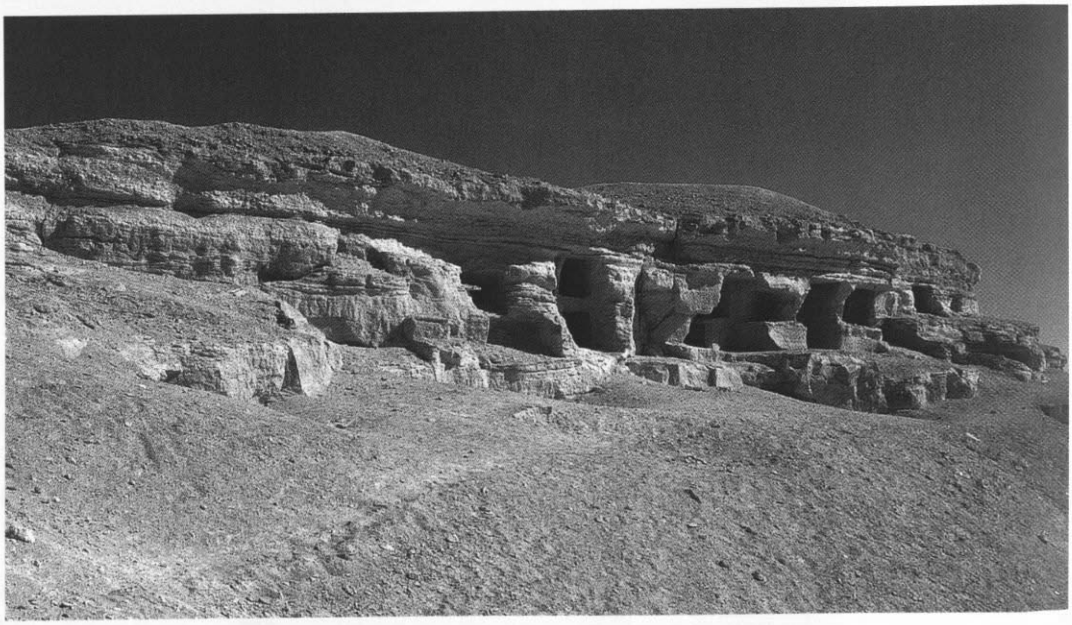


Fig. 9.5.3
Siwa, Gebel Mawta.

Bibliography: *Aghurmi, Oracle Temple*: Kuhlmann 1988; *Umm Ubayda, contra-temple*: Kuhlmann 1988; *Gebel Mawta*: Fakhry 1973: 173–206.

9.5.c Eastern Siwa

Although a few monuments to the north-east of the lake now called Birket Zeitun have long been known, it is only recent excavations that have started to give an idea of the scale and character of ancient settlement in this zone. At least six substantial villages with facilities for oil production are known to have stood in this area, only a small fraction

of which has been excavated. The remains appear to belong for the most part to the first four centuries AD.

Moving from north-west to south-east, the first major site is **Ain el-Qurayshat**, a village with an enormous 'industrial zone' containing an estimated total of sixty to seventy olive oil presses, some forty-five of which have been excavated. Each of these presses is modest in size, using several stacked millstones on a small gypsum-plastered basin (about 1.6 m^2), but if each produced 10 kg of oil a day the total output would be very considerable. Siwan olive oil was highly valued, as it is today. Adjacent are residential areas, with rubble foundations and mud-brick upper parts, mostly built around large courtyards, as well as a building (c. 15.4 x 16.2 m) identified as an administrative centre, with a dais at the centre of a large hall (cf. 9.4.c on Qasr Masuda in Bahariya Oasis). A temple still well preserved a century ago is now a heap of rubble. An ancient spring nearby is still in operation, but the accumulation of salt in the immediate area is impressive and most of the surroundings still wasteland.

Abu Shuruf is similar in character, but much of it is under modern houses. The major monument for which the site is known is its stone temple with plastered walls and vaulted roof, about 9 x 11 m, standing well preserved amid later brick houses. Its entrance is to the north; to the right after entering is a staircase to the roof, to the left a room. Ahead is a complex with a central hall and four side rooms. The cult niche is at the south end of the hall. The date of the temple is probably Roman. At **Abu el-Awwaf** is a major necropolis zone, a few kilometres north-northeast of the agricultural area where the villages are located, with rock-cut chamber tombs in a low ridge and a number of mostly ruined freestanding limestone tomb chapels over tombs cut below the flat surface of the ridge. The high quality of the chapels, with a mixture of Egyptian and Greek architectural features, much better preserved in the nineteenth century than now, suggests that they belonged to wealthy local residents. The cemetery is also probably of Roman date.

El-Zeitoun by its name ('the olives') suggests that it also belongs to the olive-producing zone; the modern village, part of a large estate in the late nineteenth to twentieth century, is abandoned, but the adjacent ancient site has not yet been excavated. There is a small limestone temple here also, more carefully built than that of Abu Shuruf.

Bibliography: *Ain el-Qurayshat*: Kuhlmann 1998: 166–7; *Abu Shuruf*: Fakhry 1973: 130–2; Kuhlmann 1998: 167-8; *Abu el Awwaf*: Fakhry 1973: 132–4; Kuhlmann 1998: 168–70; *El-Zeitoun*: Fakhry 1973: 132–5; Kuhlmann 1998: 168.

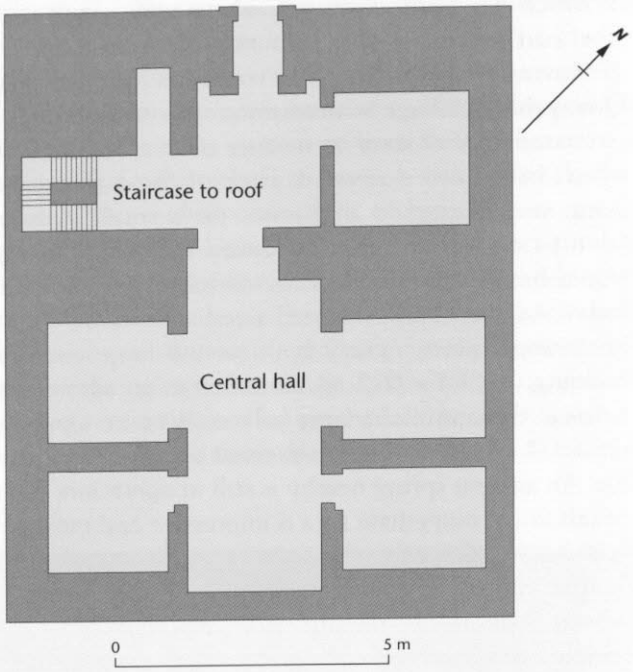


Fig. 9.5.4
Temple of Abu Shuruf (after Fakhry 1973: 131).

9.5.d Western Siwa

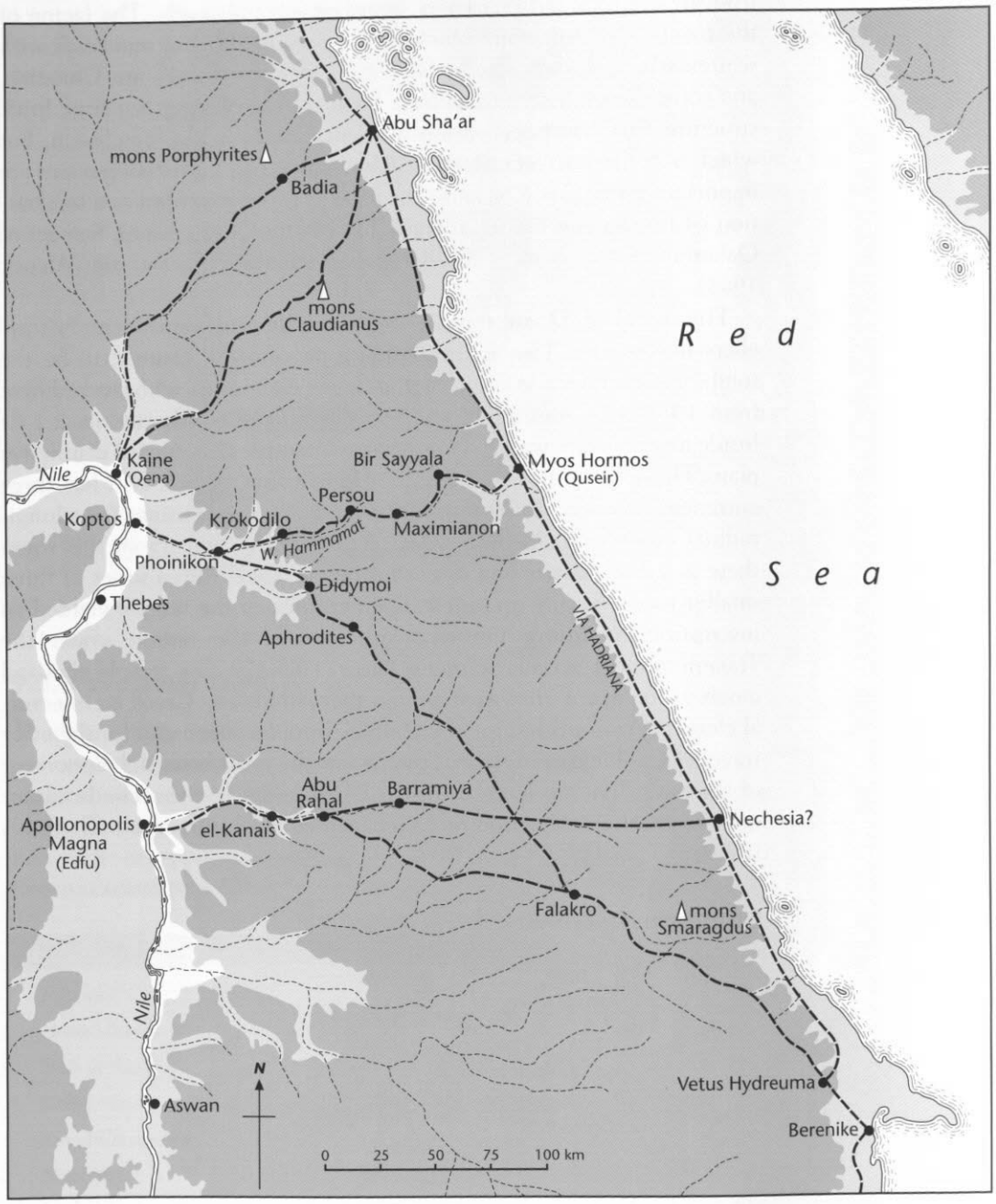
There are many rock-cut cemeteries in the western part of the oasis, some with elaborate architectural features. The most important archaeological area west of Aghurmi, however, is **Bilad el-Rum**, the 'village of the Romans'. Coming from the central part of the oasis, one arrives first at the necropolis, with tombs cut into the hillside on several levels. Recent excavations have uncovered extensive freestanding structures in

SELECTED GPS READINGS		
Aghurmi, Oracle Temple	N 29.12.29	E 25.32.64
Umm Ubayda, contra-temple	N 29.12.11	E 25.32.69
Well of the Sun	N 29.11.82	E 25.33.01
Gebel Mawta	N 29.12.67	E 25.31.40
Ain el-Qurayshat	N 29.12.49	E 25.42.73
Abu Shuruf	N 29.10.87	E 25.44.80
Abu el-Awaf turn-off	N 29.10.02	E 25.48.33
Abu el-Awwaf, site	N 29.10.00	E 25.48.37
El-Zeitoun	N 29.09.17	E 25.47.36
Bilad el-Rum, necropolis	N 29.13.65	E 25.24.42
Bilad el-Rum, 'Doric temple'	N 29.13.76	E 25.23.98

front of the rock-cut chambers, again on several levels. The facing of the fronts is in cut stone blocks, the remainder being mudbrick with whitewashed plaster. The latest burials in these tombs are Christian, and some Greek inscriptions have been found. Nearby is a large brick structure that has been variously identified as a fort or church, but which is perhaps in fact a large tomb chapel. The Christian remains are important particularly because the oasis is often regarded as a late bastion of Egyptian religion, and the life of the Coptic monk Samuel of Qalamun (5.4.c) depicts the Berbers as worshipping the sun (Alcock 1983).

The so-called **'Doric temple'** described by nineteenth-century travellers lies nearby. This is the building notoriously claimed to be the tomb of Alexander the Great by the Greek excavators who worked here from 1989–96. (Alexander was actually buried in Alexandria; 2.1.c.) Inside an enclosure wall is a long, narrow temple structure of distinctive plan. The axial entrance leads to a long room, which also has three entrances on each of its long sides. There are also footings for a longitudinal colonnade on both sides of this large room. From this room there is a door, at the end opposite the entrance, into a series of three smaller rooms axially arranged. The entrance to the temple yielded an inscription recording the reconstruction of the temple under the Trajanic prefect Servius Sulpicius Rufus (107–12). The temple plan and much of the decor are Egyptian, but there are many Greek architectural elements responsible for the temple's popular name and for the early traveller Cailliaud's judgement that it was the most beautiful monument of the oasis. The preference for the Doric order in the second century may be another indication of Cyrenaean cultural influence even at this late date.

Bibliography: *Bilad el-Rum, 'Doric temple'*: Fakhry 1973: 126–7.



10.2.1 Desert road network.

10 THE EASTERN DESERT

10.1 INTRODUCTION

The desert between the Nile Valley and the Red Sea is a large area mainly composed of stony terrain, much of it mountainous. In these mountains and the gully systems (wadis) running through them, barren though they look from the air and even from the ground, lay important resources, including gold and desirable building stone. There was also more available water from wells than might seem likely, and in some places run-off from the rare but torrential rains was captured in cisterns. On the Red Sea coast, successive Ptolemaic and Roman governments developed trading ports, particularly Berenike and Myos Hormos, from which and to which most trade between the Mediterranean and India and East Africa sailed, and which also had close connections to the west and south coasts of Arabia. From these exotic sources came pepper and other spices, ivory, pearls and perfumes. Both of these economic spheres – natural resources and trade – were important to the government, and particularly in the first two centuries of the Roman empire tremendous resources were put to work in maintaining a network of roads, wells and small forts through the desert.

The people who maintained this network left behind enough debris that the Eastern Desert has also been a tremendously rich source of textual material, mostly written on potsherds (ostraka) and mostly found in excavations during the last couple of decades. The bulk of these are letters, mostly short and to the point, dealing with needs for supplies, but many other types of texts are also found.

The last two decades have seen not only accelerated archaeological exploration of the Eastern Desert but increased tourism, fuelled in part by the rapid development of resorts along the Red Sea coast and in part by the wider availability of four-wheel drive vehicles, which make many otherwise inaccessible sites reachable. Real-estate development has engulfed sites like Abu Sha'ar, a Late Antique fort and Christian settlement north of Hurghada, and the pressure of tourism has damaged sites like Mons Claudianus and Mons Porphyrites, located near major resorts. Many of the desert stations, mining camps, and sanctuaries, however, are still remote. They are numerous, and only a selection of the most significant is described here.

The modern road system parallels the ancient only in part; details are given in the next section (10.2). The Red Sea resort towns provide abundant hotels to serve as a base for exploration of the area. Many sites are on or near the main roads, but some

(particularly Mons Porphyrites and its area) require four-wheel drive vehicles. The inspectorate for the Eastern Desert of the Supreme Council for Antiquities is based at Qena.

Bibliography: Jackson 2002.

10.2 DESERT ROADS AND STATIONS

Over the hundreds of years of Ptolemaic and Roman exploitation of the desert region, a number of major roads were built (or rebuilt) and equipped with way-stations where water (from wells and cisterns) and shelter were available. Many of these were fully developed and fortified only as late as the period from Vespasian to Hadrian. All of the roads include a network of by-ways to other sites, often mining camps, that will not be described here. The complete Roman system included four points of departure in the Nile Valley. The main terminus for the quarry area was **Kaine** (modern Qena), from which ran a road to the north-northeast, forking at al-Aras 25 km north into a northern route leading past Mons Porphyrites and on to the coast at Abu Sha'ar and a southern route leading to Mons Claudianus and other mining and quarrying areas to its south. The principal road from Qena today runs south of Mons Claudianus to Safaga, the port and transit town for pilgrimage to Mecca.

The major emporium for the caravan routes to the Red Sea ports in the Roman period was **Koptos** (modern Qift). The road from Koptos ran south-east 35 km to a fork at Phoinikon (modern El-Laqeita), from which the road to Myos Hormos (Quseir) ran east through the Wadi Hammamat, as does the modern road (see below) and that to Berenike continued south-east through the stations of Didymoi, Aphrodites and so on via Vetus Hydreuma (Wadi Abu Greiya) to Berenike. Excavations at Didymoi have produced large numbers of ostraka.

From **Apollonopolis Magna** (modern Edfu), still further to the south, another and older road for the caravan traffic ran east to the Pan sanctuary at El-Kanaïs, where it forked into a road running south-east that joined the Koptos-Berenike road at Falakro and a road east to Marsa Nakari. Spurs from these roads also reached some mining operations. The Edfu-Berenike route seems to have been used principally in the Ptolemaic period, with the Koptos-Berenike road supplanting it in the Roman period. Today's road from Edfu to the coast bears somewhat to the north of the ancient road, reaching the coast at Marsa Alam.

The final piece of the road system was the **Via Hadriana**, a road constructed by the orders of the emperor Hadrian, running from Antinoopolis (6.3.c) to the north-east through the mountains, then looping south-east to the coast and running along the coast all the way to Berenike. It was a long and generally well-engineered road, parts of

which can still be traced today; the modern coast road follows its traces only in part.

Bibliography: *Kaine-Myos Hormos*: Sidebotham, Zitterkopf and Riley 1991; Cuvigny 2003; *Koptos-Berenike*: Sidebotham 2002; *Edfu-Berenike*: Sidebotham 2002; *Via Hadriana*: Sidebotham, Zitterkopf and Helms 2000.

SELECTED GPS READINGS		
Phoinikon (El-Laqeita)	N 25.53.07	E 33.07.26
Didymoi (Khashm el-Menih)	N 25.45.30	E 33.23.58
Vetus Hydreuma (Wadi Abu Greiya)	N 24.03.68	E 35.17.23

10.2.a Koptos (Egyptian *Kbt*) was located about halfway between the Nile and the edge of the desert. From it departed the caravans of camels and donkeys bound for the ports of Myos Hormos and Berenike. Koptos was not only a caravan hub, however, it was a major religious and administrative centre of considerable antiquity and the home of a cavalry unit in Roman times. Although it is said to have been destroyed under Diocletian for its part in a revolt, it in fact survived into Late Antiquity, its fortunes fluctuating with those of the desert traffic for trade or mining. (For the history and monuments of Koptos, see 8.3.) It became the seat of bishops, from one of whom, Pisenthios (AD 569–632), a considerable cache of correspondence in Coptic has survived. It was fed by a canal from the Nile, which ended in a basin that served as the harbour for shipping coming upriver on the Nile and the terminus for the roads to the Red Sea ports. This was the location of the customs house through which all of this trade passed and where the duty on goods leaving or entering Egypt was collected. Individuals also paid a tax at departure from the country, in amounts varying by their status, as well as a fee for the use of the desert roads.

Box 10.2

Bibliography Boussac 2002; Burkhalter 2002; *Coptos* 2000; Cuvigny 2000a.

The tariff of Koptos

This famous stela (Bernand 1984, no. 67), now in the Graeco-Roman Museum, Alexandria, was found at the beginning of the ancient desert road in 1894. On order of Mettius Rufus, prefect of Egypt at the time of Domitian, the tolls for leaving Egypt and for using the desert road were officially announced on a limestone stela. When they left Egypt by ship, males paid between 5 and 10 drachmas according to their occupation (sailors, shipbuilders 5 dr.; workmen and pilots 8 dr.; guards and officers 10 dr.); women paid double and prostitutes 108 dr. Tickets which gave permission to use the desert road were priced differently for males and females, for camels, donkeys, wagons, ship masts and even dead persons.

10.2.b The Koptos to Myos Hormos Road. The *Hodos Myshormitike*, as it was called in Greek, stretched 174 km from Koptos to Myos Hormos, a journey of five or six days under normal circumstances. Compared to the 392 km to Berenike, requiring twelve days or more, it was short. Given the expense of land transport in antiquity, this comparative proximity was valuable, but it did not always outweigh the difficulty of sailing against the wind up the gulf, particularly as the cargo vessels became larger. As a result of this handicap, Myos Hormos started to lose out to Berenike by the middle of the first century AD. Even so, it retained importance as a link for travellers and the imperial government to Arabia and to the mineral resources of the region.

The road, which runs in part through the flat-bottomed Wadi Hammamat, was in use even in prehistoric times and already in the Old Kingdom led to gold-mining and stone-quarrying operations. Its numerous graffiti testify to visitors across the millennia. The Ptolemaic interest in the India trade led to the development of the old port at the end of the road (see 10.4.c). Little trace remains today of Ptolemaic installations on this road. Its physical face belongs mainly to the first and second centuries, but excavators have noted that the Roman military kept the forts clean, even when they abandoned them; as a result, dating the construction of forts is difficult unless documents from the dump provide information.

The major stations along this road at its peak were, travelling east, **Phoinikon** (El-Laqeita), **Krokodilo** (El-Muwayh), **Persou** (Bir Umm Fawakhir), **Maximianon** (El-Zarqa), the best preserved despite the enormous crater where its cistern was, and **Bir Sayyala**. Other smaller stations used earlier or later have also been identified. Most of these have had some degree of excavation in recent years, including signifi-

Fig. 10.2.2
Maximianon

Fig. 10.2.3
Bir Umm Fawakhir, the mining village.

cant discoveries of texts; these are for the most part not yet published. What had been unfortified shelters became forts under Vespasian, presumably as a result of increasing threats to travellers' security from desert tribes. The threats were real: an ostrakon from Krokodilo mentions a Bedouin attack on one of these forts, in which prisoners were taken. A quarrying village in the Wadi Hammamat was abandoned around the same time, probably also for security reasons. Apparently Vespasian's administration militarized both caravan roads, most likely in the 70s AD. Successive waves of abandonment and construction under the following emperors kept pace with changing circumstances.

After the early third century, the desert-road infrastructure was allowed to fall out of use, and except for signs of reoccupation in the period of Diocletian and the first tetrarchy, it is not until the fifth century AD that the government again found it worthwhile to support any significant establishment along this road. At that point, the gold- mining activity around **Bir Umm Fawakhir (Persou)** created a sizeable village, perhaps of a thousand inhabitants (about 216 buildings in the main settlement, clustered into larger compounds) 5 km north-east of Wadi Hammamat, which was mapped and surveyed in the 1990s. The house walls are well preserved and have many built-in stone features like niches and benches. The surrounding mountainsides are riddled with mines, both open trenches and tunnels, and there are many signs of crushing and grinding the quartz to extract the gold. Towers placed above and along the road may belong to this period and be connected to the mining in Bir Umm Fawakhir and at Bir al-Nakhil, near Quseir.

Bibliography: Brun 2002; Cuvigny 2003; Zitterkopf and Sidebotham 1989; *Bir Umm Fawakhir mining camp*: Meyer 2000; *Inscriptions*: Bernand 1972a.

SELECTED GPS READINGS		
Phoinikon (El-Laqeita)	N 25.53.07	E 33.07.26
Krokodilo	N 25.56.34	E 33.24.07
Wadi Hammamat graffiti	N 25.59.44	E 33.34.22
Persou	N 26.00.77	E 33.36.49
Maximianon	N 26.00.05	E 33.47.23

10.2.c The Edfu to Marsa Nakari Road. The first third of this route is identical with the first leg of the road from Edfu to Berenike. It includes the important Paneion at **El-Kanaïs**, from which numerous ancient travellers' inscriptions have been recorded. This temple is cut into the rock of the hillside and provided with a pillared façade, a rectangular *pronaos*, and three inner rooms. Originally a sanctuary of Ammon, it was the site of worship of Pan, the god of the desert, in the Hellenistic and Roman periods.

At **Abu Rahal**, a Ptolemaic to early Roman station, the road to Marsa Nakari diverges from the Berenike road. It passes through **Bir 'Iayyan**, an unfortified Ptolemaic station at the foot of a sandstone bluff, where an inscription from 257 BC was found. This records its erection by a toparch (a regional official) and gives the exact distance from the Nile. The road continues on to reach the gold-mining camp of **Barramiya**, no doubt a major reason for the existence of the road; spurs led to other mines as well. From there it continues on a westerly course before dipping south into **Marsa Nakari**, a site on the Red Sea from which only Roman pottery has so far been recovered. It has been speculated that this port was the Nechesia mentioned in the *Geography* of Claudius Ptolemy.

Bibliography: Sidebotham and Wendrich 1999: 364–9; *El-Kanaïs*: Bernand 1972a; *Bir 'Iayyan*: Bagnall 1996.

SELECTED GPS READINGS		
El-Kanaïs	N 25.03.32	E 33.18.56
Abu Rahal West	N 25.00.18	E 33.27.31
Abu Rahal	N 25.00.36	E 33.28.06
Bir 'Iayyan	N 25.02.50	E 33.43.28
Barramiya	N 25.04.14	E 33.47.47
Marsa Nakari	N 24.55.50	E 34.57.74

10.3 QUARRIES

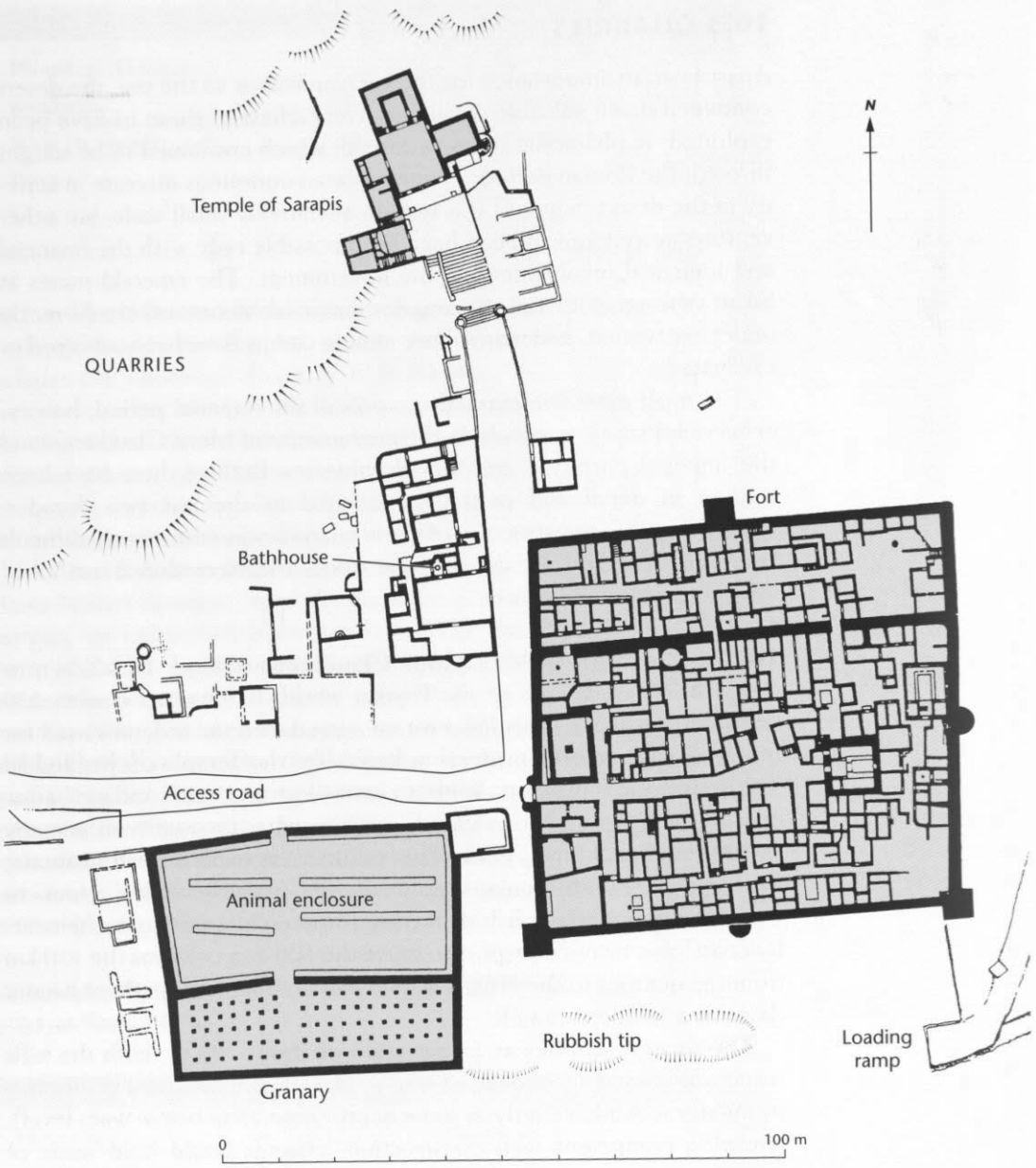
Apart from its importance for the caravan routes to the sea, the desert contained many valuable resources. The earliest of these to have been exploited, in pharaonic times, was gold, which continued to be sought through the Roman period. That era saw an enormous increase in activity in the desert. Some of this was on a relatively small scale, but other ventures were large and can have been possible only with the financial and logistical involvement of the government. The emerald mines at Sikait (the ancient Mons Smaragdus, Emerald Mountain) are currently under excavation, and many more mining camps have been surveyed or excavated.

The most extensive extractive works of the imperial period, however, were for stone, particularly the grey granite of Mons Claudianus and the 'imperial porphyry' of Mons Porphyrites. Both of these have been studied in detail and partially excavated in the last two decades. Supporting the infrastructure of these quarries was enormously difficult and expensive, and the use of these stones thus served as a symbol of imperial wealth and power.

10.3.a The quarry-field of **Mons Claudianus** (col. pl. 10.3.2) is now one of the best known of the Roman world. Its quarries – some 130 small cuttings have been inventoried – produced the columns used for high-prestige imperial projects in Rome like the Temple of the Deified Trajan and the Pantheon. With a central fort and small 'villages' adjacent to the quarries, Mons Claudianus housed a community of as many as 900 individuals at its peak. This venture was expensive to maintain, for it required both regular supply caravans from the valley, a four- to five-day journey (fresh fish deliveries, fortunately, came from the nearby coast) and heavy transport to move the 100-ton columns the 120 km from the quarries to the Nile, a wagon journey that took perhaps twenty days for a hundred camels.

The quarry field lies at an elevation of about 700 m, with the hills rising only modestly above the wadis. The stone was a grey granodiorite. Water is available only at some depth (now 25 m below wadi level), requiring competent well construction; cisterns could hold some of the run-off from occasional rainstorms and supplement the wells. The central complex included the fort (which occupies more than half a hectare), a temple of Sarapis, a bathhouse, provisions for storage and an enormous complex for the care of the numerous animals needed both to supply the quarries and to haul the stone columns. As in general in the Eastern Desert, construction is mainly of dry stone walls, in this case of the local granodiorite; in the bath complex, fired brick is used in places.

Just 1 km to the south-west of the main complex is a smaller settle-



ment now referred to as the Hydreuma (well), although in fact it has no well. It consists of a small fort with a thick outer wall, and adjacent plaster-lined tanks and troughs. Across an erosion gully is a series of irregular buildings (interpreted as workers' housing). To the north-east is a substantial building on a hillside terrace, taken to be the commandant's house. The entire settlement, which existed before the main complex, is probably the original core of the Mons Claudianus quarrying operation.

Fig. 10.3.1
Mons Claudianus (after Peacock and Maxfield 1997: 23).

Food in the Desert

Feeding the large staff, military and civilian, of the quarrying and mining operations in the Eastern Desert posed a challenge to Roman logistics. Many of the letters on ostraka show that food did not always arrive on time: 'Zosimos to Kastor his brother, greetings. Please, brother, send me two loaves of bread. For no grain has come up here for me so far. Farewell' (*O.Claud.* II 284). Other letters ask for fresh produce, fish and other foods to provide variety in the diet. Despite the distance from the valley and the aridity of the desert, however, a remarkable range of foods, some of them very luxurious, made it to Mons Claudianus. Plant remains from the excavations have documented not only garlic, onions and cabbage, but artichoke, cucumber, beets, lettuce, cress, endive, purslane and a number of herbs. Many of these were grown in small gardens where well water was available. Expensive wines and oils, at least for the higher-ranking members of the staff, were also imported.

Box 10.3

Bibliography: Adams 2000; Bingen 1992, 1997; Peacock and Maxfield 1997; Van der Veen 1998.

SELECTED GPS READINGS		
Mons Claudianus, fort	N 26.48.55	E 33.29.20
Mons Claudianus, 'Hydreuma'	N 26.48.31	E 33.28.73

10.3.b The purple stone quarried at **Mons Porphyrites** was highly prized, its colour associated with imperial grandeur; the stone was used in the Temple of Venus and the Basilica of Maxentius at Rome and the imperial palace in Constantinople, among other structures. The quarry area, some 40 km from the modern resort centre of Hurghada, is not far from the coastal plain, but access is difficult even today, with the main route a stony track up a wadi subject to rare but violent deluges that bring down quantities of rock. The site consists of a core settlement ringed by quarry sites with their own encampments. The core includes a fort, a water supply, and two temples (of Sarapis and Isis). The workable stone lies high in the surrounding mountains, at altitudes reaching 1500 m or more, and the quarries are thus more distant and difficult of access than those at Mons Claudianus. The logistical difficulties of removing columns quarried in such locations were formidable, and the travel time (upwards of an hour from the core to some of the quarries) meant that the community lived in a more dispersed fashion than at Claudianus.

An inscription found in the 'Bradford' quarries, 1.7 km north of the fort, claims credit for the discovery of the quarries for Gaius Cominius Leugas. The stone gives an exact date for its erection of 23 July AD 18, or early in the reign of Tiberius. The stela also has a depiction of Pan (Egyptian Min), the ithyphallic god worshipped thoughout the deserts. The core settlement, by contrast, seems to be late first century AD or even later, under Domitian or Trajan. It probably accompanied the

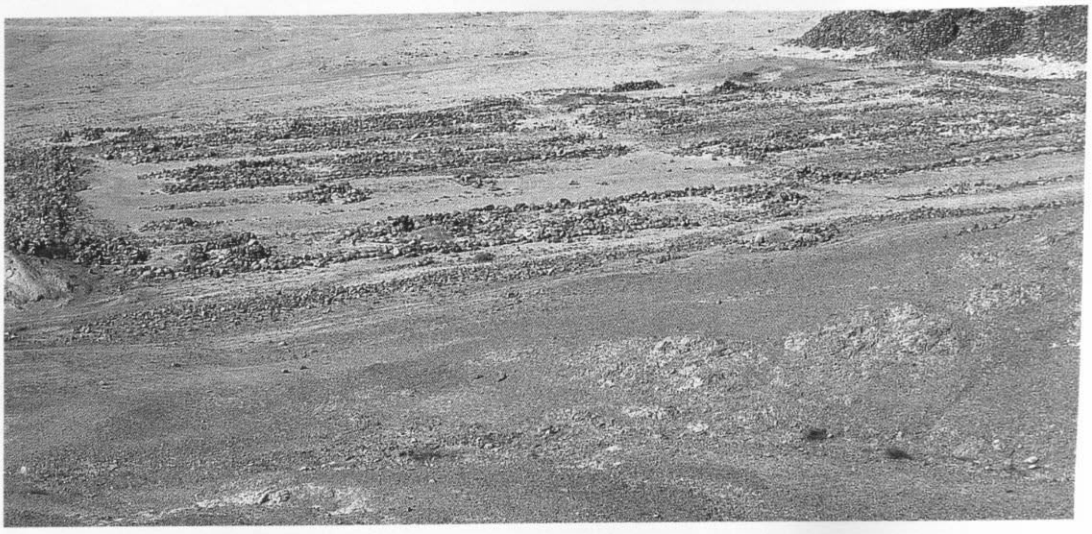


Fig. 10.3.3
Badia, animal lines.

opening of additional quarries. The Lycabettus quarries, with five associated 'villages', were probably among these, and they remained active for a long time, being a major centre of activity in the fourth century, when the slipways and roads were repaired for shipping columns cut for use in Jerusalem.

The first station on the road from the quarries to the valley, Badia, has a well-preserved fort with animal lines. To the south-west is another quarry site, at Umm Balad, that apparently proved unsuccessful as a source of stone because the stone did not split cleanly. Recent excavations in its dump have yielded numerous ostraka, not yet published.

Bibliography: Maxfield and Peacock 1998, 2001a.

SELECTED GPS READINGS		
Mons Porphyrites, fort	N 27.15.03	E 33.18.09
Mons Porphyrites, loading ramp	N 27.18.40	E 33.21.29
Badia	N 27.12.86	E 33.20.69

10.4 PORTS

The Egyptian Red Sea coast is not in general a welcoming one, and ancient ships sailing north against the prevailing winds found few good harbours. The two best were those developed by the Ptolemies and Romans for their naval and trading activities to the south and east, Myos Hormos and Berenike. Both of these have been partly excavated and are discussed in more detail below. Others are known from ancient sources or from archaeological exploration, but it is still uncertain

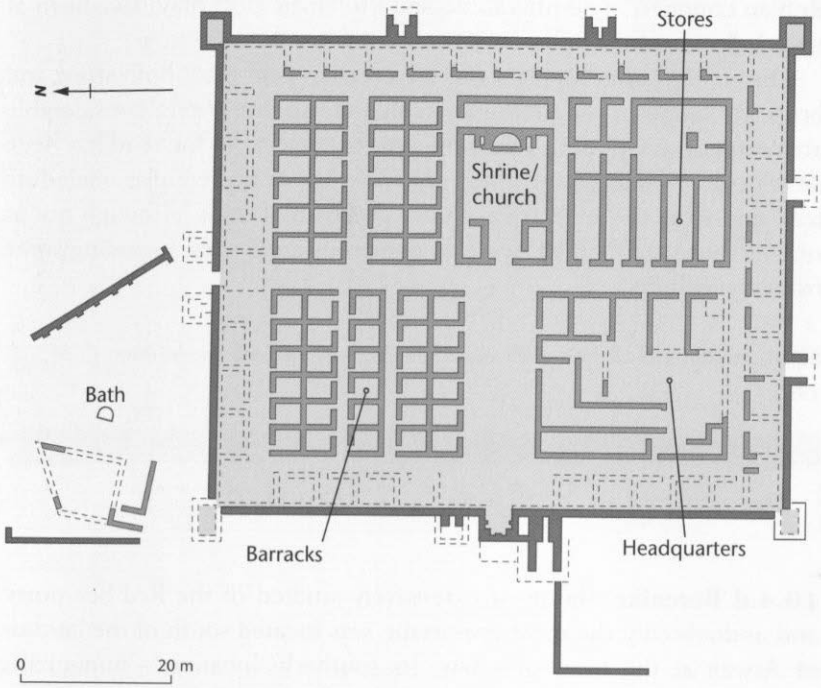


Fig. 10.4.1
Abu Sha'ar, fort
(after Sidebotham
1994: 135).

exactly where some known names like Nechesia and Leukos Limen are to be placed. A Roman fort was built *c.* 309–11 at the end of the road from Kaine to the coast, at **Abu Sha'ar**. After its abandonment by the military, the fort eventually became a Christian settlement, apparently a monastery. Texts found there show connections across the Red Sea, to Sinai or Arabia, and it appears that the headquarters area of the fort became a shrine attracting visitors, who probably came by water. But Abu Sha'ar never became a major port. Other ports have not yet been the subject of systematic exploration.

Bibliography: *Abu Sha'ar*: Bagnall and Sheridan 1994a, 1994b; Sidebotham 1994.

GPS READING		
Abu Sha'ar	N 27.22.13	E 33.40.97

10.4.c Recent archaeological discoveries have demonstrated that **Myos Hormos (Quseir)**, the location of which was long uncertain, was indeed located at or near the modern Quseir. The earliest remains found so far at Quseir el-Qadim ('ancient Quseir'), 10 km to the north of the modern town, are Roman. This was perhaps a new foundation under Augustus to take advantage of the sheltered port, from which Strabo tells us 120 ships sailed to India yearly just a few years after the

Roman conquest. The pharaonic and Ptolemaic port may have been at the modern town.

Quseir el-Qadim was laid out on a regular grid plan. Both stone and brick are found in the buildings, which are spread over a considerable area west of the modern road (the area to the east of the road has been developed). Some of the finds resemble those at Berenike, including teak and wine jars with their plugs. The textual finds, although not as rich as those at Berenike, were of numerous languages, including some from south India.

Bibliography: Bagnall 1986; Peacock 1999–2002; Whitcomb and Johnson 1979, 1982.

GPS READING		
Quseir el-Qadim	N 26.09.42	E 34.14.54

10.4.d Berenike, the most extensively studied of the Red Sea ports, and undoubtedly the most important, was located south of the latitude of Aswan at the head of a bay. Its southerly location – minimizing northward sailing distance – and good harbour were the compensations it offered for its great distance from the Nile Valley and its unpromising hinterland. It is possible that a skeleton population occupied the port during the off-season, supplemented by much larger numbers of service workers during the sailing season. But excavations have found industrial areas, including metalworking shops and brick-firing facilities, that show Berenike was not just a way-station, and the investment in buildings was considerable. However improbable the modern barrenness of the landscape makes it seem, clearly significant quantities of combustibles were found to support industrial activity and water brought in to make life possible.

Box 10.4

Goods for India

The dump at Berenike has yielded numerous potsherds used to record permission to pass through the customs gate with goods, mostly wine. The majority give only the minimum information, like this one: 'Sosibios to Andouros, greetings. Let pass for Pakoibis son of Kleitos, 4 half-kadia of oil and 4 *Italika* of wine.' That these were to go on board ships is indicated by slightly fuller texts: 'Rhobaos to those in charge of the customs gate, greetings. Let pass for Petermenis son of Paminis 8 *ladikena* of wine, for outfitting.' (The *ladikenon* is a jar of wine from Laodicaea in Syria.) The ostraka thus confirm the statement of the *Periplus of the Erythraean* Sea (a sailor's manual): "In this port of trade [Barygaza, in India] there is a market for wine, principally Italian but also Laodicaean and Arabian." The Indian courts had a taste for Italian wine, whatever it may have tasted like after traveling from Campania to India.

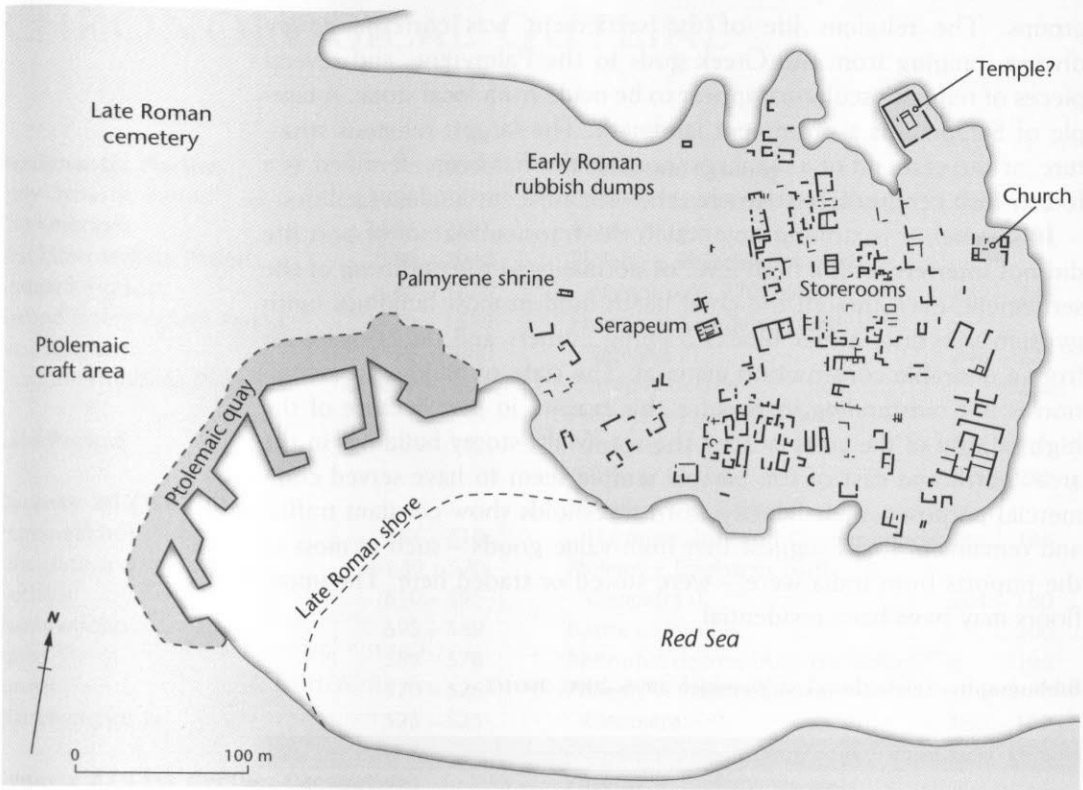


Fig. 10.4.2 Berenike (after Sidebotham).

The early Roman period is particularly well known from the rubbish dump, where conditions of preservation have been favourable to the survival of organic materials and writing. The texts from the dump reveal the existence of Berenike's customs gate, through which passed quantities of wine and oil from around the Mediterranean, headed mainly for India. They also mention the soldiers and tax collectors who controlled the flow of camels and people moving this merchandise and the luxury goods travelling in the return direction.

It is difficult to be certain whether Berenike's existence continued uninterrupted from the third century BC to the end of antiquity (it was abandoned in the first half of the sixth century). Excavations have so far found mainly Roman buildings, and there are no Ptolemaic written documents. There is also a considerable gap from the third century AD until perhaps the late fourth century. Several documents testify to the presence of people from the other side of the Red Sea, Palmyrenes and others. Some eleven languages have appeared in documents from Berenike, including Tamil-Brahmi, reflecting the involvement in the maritime trade of South Asian groups as well as Greeks, Romans, Palmyrenes, Arabs and Egyptians. Considerable finds of south Indian domestic pottery suggest that Indians were residents as well as visitors. There is also evidence for the presence of southern-desert nomadic

groups. The religious life of the settlement was correspondingly diverse, ranging from the Greek gods to the Palmyrene, and several pieces of religious sculpture appear to be made from local stone. A temple of Sarapis was a prominent landmark. The largest religious structure, at the east end of a main east-west street, has been identified as a fourth-fifth century Christian church, with adjacent kitchen facilities.

In general, it is striking how much the transient nature of port life did not interfere with a high level of normality in the outfitting of the settlement, even though the coral heads used in most buildings (with gypsum/anhydrite ashlar blocks framing corners and doors) were far from a desirable construction material. The state of building preservation is not outstanding in part for this reason, in part because of the high salinity of the areas nearest the sea. Multi-storey buildings in the areas north and east of the Sarapis temple seem to have served commercial purposes; their heavily worn thresholds show constant traffic, and remains of locks suggest that high-value goods – such as most of the imports from India were – were stored or traded here. The upper floors may have been residential.

Bibliography: Sidebotham and Wendrich 1995–2000, 2001/2.

GPS READING		
Berenike	N 23.54.62	E 35.28.42