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### **Tell el-Kedwa (Qedua): Saite Fortresses on Egypt's Eastern Frontier. The 2007 season of SCA fieldwork**

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# Tell el-Kedwa (Qedua): Saite Fortresses on Egypt's Eastern Frontier. The 2007 season of SCA fieldwork.<sup>1</sup>

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## Introduction

From 2007 because of the various risks to the area surrounding Tell el-Kedwa, such as irrigation canals, drainage system and cultivated lands projects (Fig.1), a team of the Supreme Council for Antiquities<sup>2</sup> carried out a programme of rescue excavations at Tell el-Kedwa to shed light on one of the most important Late Period sites in North Sinai. The first season in December 2007 re-discovered the town's defense system. Excavations were continued in March and April 2008 in the southern part of the site, and will be published in due course.



Fig.1. Map of Tell el-Kedwa and its environment. Underlying image ©GoogleEarth

<sup>1</sup> The excavations at Tell el-Kedwa are part of the Ways of Horus Archaeological Project which started in 1992 during the North Sinai Archaeological Salvage Project. (Abd el-Maksoud, M., "Projet de sauvetage des sites antiques du Nord Sinai," *Discussions in Egyptology* 24 (1992), pp.7-12).

<sup>2</sup> The Tell el-Kedwa Team: Dr. Mohamed Abd el-Samie, Dr. Hesham M. Hussein, Sayed Abd el-Aleem and Ezat F. Massoud. A special debt of thanks goes to Dr. Mohamed Abd el-Samie, General Director of the Antiquities of Lower Egypt, and the director of Tell el-Kedwa mission, for his effort and support, also to Mr. Ezat F. Massoud, Chief Inspector of North Sinai, and to Hany Victor.

## The Site

The site of Tell el-Kedwa lies on flat ground, in the vicinity of Gellbana village, at the south-eastern edge of el-Tina plain (Sahle el-Tina zone), 15km to the east of the Suez Canal and 1km north-east of Tell el-Herr. Its modern Arabic name 'el-Kedwa' <sup>3</sup> 'الكدوة' means the small hill and the site is sparsely covered by tamarisks and other low bushes which have formed the small hills that give the site its modern name (Fig.2).

Tell el-Kedwa sits on the north-eastern edge of the eastern lagoon. In pharaonic times the lagoon was probably fed by the Pelusiac branch, and the sea shore was closer than today.<sup>4</sup> As demonstrated by recent excavations at North Sinai archaeological sites, Tell el-Kedwa is part of a series of sites (Tell Dafana – Tell Hebwa 1 – Tell Hebwa 2 – Tell el-Ghaba and Tell el-Kedwa), which formed and controlled the eastern gate of Egypt during the Saite Period (Fig.3).<sup>5</sup>



Fig.2. A view of Tell el-Kedwa, showing the 'small hills' with tamarisks which give the site its modern name.

## Previous Excavations

During the Israeli occupation of Sinai (1967-73), the North Sinai expedition of Ben-Gurion University conducted excavations at the site.<sup>6</sup> Tell el-Kedwa was designated as T.21 on their survey maps. According to E. Oren T.21 (Tell el-Kedwa) was occupied by a gigantic fortified structure, which was obvious on aerial photographs prior to the excavations.<sup>7</sup> The fortified structure dated to the Saite Period, and consisted of a massive square mud-brick enclosure 200m on both sides, the massive enclosure wall is 15m-20m wide, but the east wall is the widest at 20m (Fig.4).<sup>8</sup>

<sup>3</sup> Ibn Al-Jawzi, *al-Azkyā (The intelligent)*, p.151 (<http://www.saaid.net/book/9/2302.pdf>).

<sup>4</sup> Marcolongo B., 'Évolution du paléo-environnement dans la partie orientale du Delta du Nil depuis la transgression flandrienne (8,000BP) par rapport aux modèles de peuplement anciens', *CRIPLE* 14 (1992), pp.23-31; Moshier S.O. and el-Kalani A., 'Paleogeography along the ancient ways of Hours (late bronze age) in northwest Sinai, Egypt', *Geoarchaeology* 23, pp.450-473 ; Hoffmeier J.K. & Moshier S.O., 'New paleo-environmental evidence from North Sinai to complement Manfred Bietak's map of the eastern Delta and some historical implications', in *Timelines: Studies in Honour of Manfred Bietak*, Volume II, Oriental Lovaniensia analecta, 149 (Leuven: Peeters, 2006), pp.167-176.

<sup>5</sup> Hesham M. Hussein, *The Egyptian Eastern Border, a Historical and Archaeological Study since the beginning of the History until the end of Thirtieth Dynasty*, unpublished PhD, Suez Canal University, (2013), pp.274-290 (Arabic).

<sup>6</sup> Oren E., 'An Egyptian fortress on the military road between Egypt and Canaan', *Qadmoniot* 6 (1973), pp.101-3 (Heb.); Oren E., 'Migdol fortress in north-western Sinai', *Qadmoniot* 10 (1977), pp.71-76 ; Oren E., 'Migdol: A new fortress on the edge of the eastern Nile delta', *BASOR* 156 (1984), pp.7-44 ; Pelleg J., Baram J., Oren E., 'An investigation of bronze artifacts from the North Sinai coast and Nile delta region', *Metallography* 12 (1979), pp.313-324 ; Pelleg J., Baram J., Oren E., 'Analysis of bronze arrowheads of the Saite period from the Nile delta region', *Metallography* 16 (1983), pp.81-98.

<sup>7</sup> Oren E., 'Migdol: A new fortress on the edge of the eastern Nile delta', *BASOR* 156 (1984), pp.7-44 (<http://www.jstor.org/stable/1356923>).

<sup>8</sup> *Ibid*, p.10.

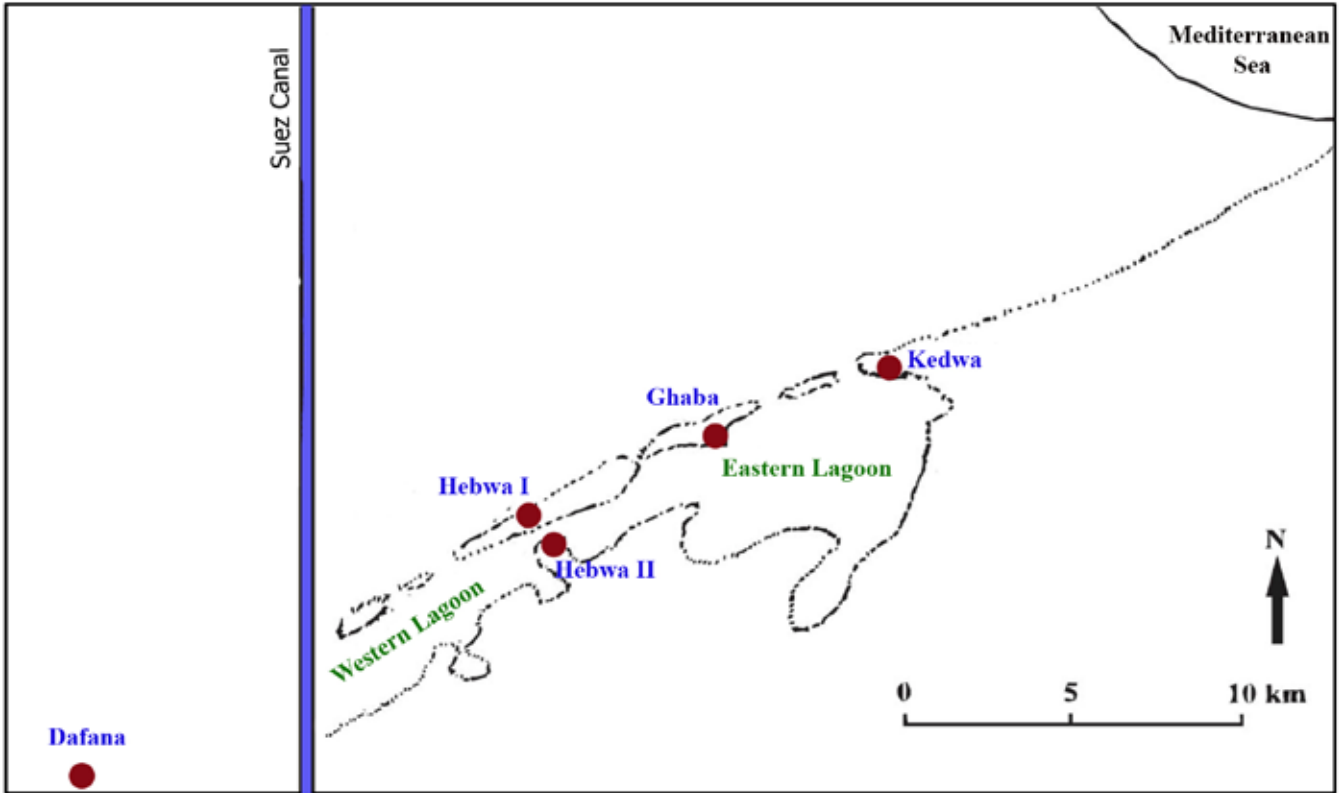


Fig.3 Map showing Saite Period sites in north-west Sinai.

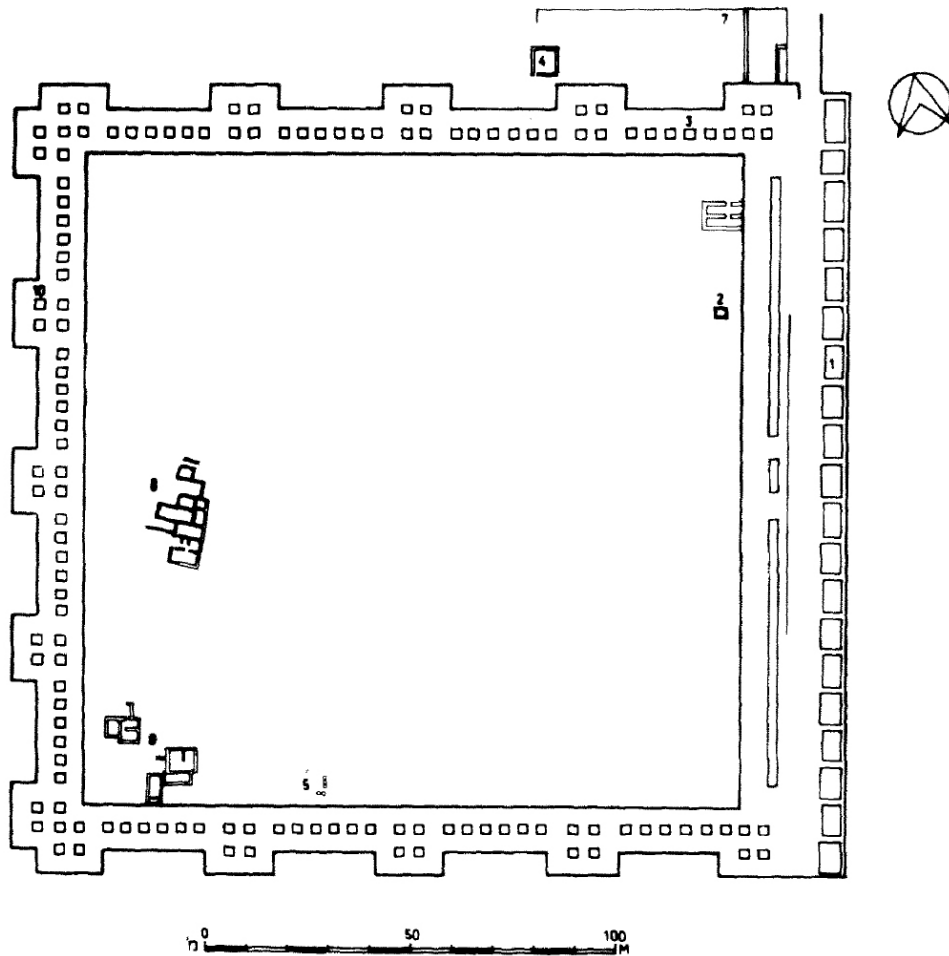
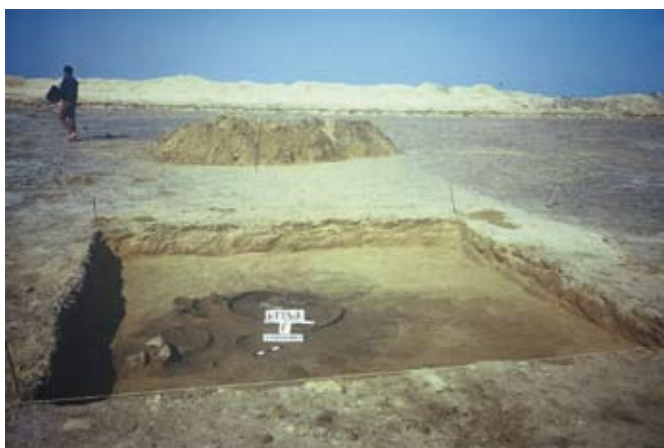


Fig.4. Plan of the fort at Tell el-Kedwa (after Oren).

In 1992 the North Sinai Archaeological Salvage Project was launched by the Supreme Council of Antiquities as a response to the impact of the Northern Sinai Agricultural and Irrigation Project. The purpose of the Archaeological Project is to rescue, save, and protect more than 30 endangered archaeological sites dating back to different periods, especially those which were seriously affected by irrigation canals and drainage systems.<sup>9</sup> The Egyptian Mission was initially directed by Osama Hamza (Inspector of North Sinai) who conducted excavations at the area west of Tell el-Kedwa (350m to the west of the Tell el-Kedwa fortresses) during September 1992. According to Hamza some trenches were made (L14, A, B, C, D, E), and many pottery sherds and animal bones were discovered (Figs.5-6).<sup>10</sup>

Another mission directed by Nabil Eizat el-Sherrif (former Chief Inspector of North Sinai) undertook limited excavation in the Tell el-Kedwa region from 31 December 1992 to 15 March 1993. As reported by Mr. el-Sherrif this work was concentrated in the area to the north of the main fortress. It was very difficult to dig because of the water table and there were many burnt areas covered with pottery sherds. The Egyptian mission excavated all these places, and found many different shapes of pottery, some are complete and the others were broken into pieces (Fig.7). However, there is no architecture related to these pottery find-spots.<sup>11</sup>

In 1993 a joint Egyptian-Canadian mission, directed by D. Redford, conducted limited excavations and surface survey at Tell el-Kedwa for three seasons (6-22 August 1993, 9-19 June 1997 and in June, 1998). The mission excavated a gas-pipe trench (2.0m × 50.0m) across the fortification along the east side of the easternmost tower on the north side of the fort. Redford noted that the span of occupation represented at Tell el-Kedwa appeared to have been confined to the Saite Period.<sup>12</sup>



*Figs.5 and 6. SCA excavation trenches at Tell el-Kedwa, 1992.*



*Fig.7. Complete and broken pottery excavated at Tell el-Kedwa in the 1992-93 SCA season*

<sup>9</sup> *North Sinai Archaeological Salvage Project Reports* (SCA unpublished).

<sup>10</sup> Osama Hamza, 'Qedwa', *Cahiers de la Ceramique Egyptienne* 5 (1997), pp.81-85 (pls. I-XVII); *North Sinai Archaeological Salvage Project Reports* (SCA unpublished).

<sup>11</sup> Nabil Ezat el-Sherrif, *Preliminary Report of Tell el-Kedwa excavation, season 1992-1993* (SCA).

<sup>12</sup> Redford, D., 'Report on the 1993 and 1997 Seasons at Tel Qedwa', *Journal of the American Research Center In Egypt*, Vol. XXXV (1998), p.55.

## The 2007 season

In 2007 the North Sinai team decided to start working at Tell el-Kedwa. Based on the results of previous missions at el-Kedwa fort, we had two main problems to solve. Why was the eastern wall wider than the other walls of el-Kedwa Fortress and where was the main entrance of the uncovered fort? Some theories had been proposed to help in answering these questions but archaeological evidence was lacking.

Early in the morning the walls and towers of Tell el-Kedwa fort were very obvious due to the humidity and the differences between colours (Fig.8), so we started to trace the outer and inner faces of the main fort. The massive walls of the fort measure 11.0m wide, which increased to 17.50m at the point where towers are added. Casemate chambers occur in the massive walls and towers of the fort. The east side of the fort breaks the pattern as it measures 25.0m wide and has no towers except at the north and south corners; the eastern wall is honeycombed on its outer side by large casemate chambers filled with pure sand.

By that point we had the same results and the same plan as Oren had reproduced in his publication,<sup>13</sup> and we started to search for answers to our two main questions. In order to gain as much information as possible about the Tell el-Kedwa fortification, we decided to excavate the massive eastern enclosure wall, which measures 25.0m in thickness. During the excavation process we realised that there was more than one fortress at Tell el-Kedwa.

Two massive forts from the Saite Period have been identified, the eastern wall of both fortresses suggested that the foundations of the massive later fort were cut into into the inner face of the earlier fort. The later fort was the one discovered by Oren, and we have labeled it as "Fort B". Recent excavation suggests that Fort B is square in shape 191.85m × 191.50m. Its eastern wall measures 11.0m in thickness, which increased to 17.50m at the point where



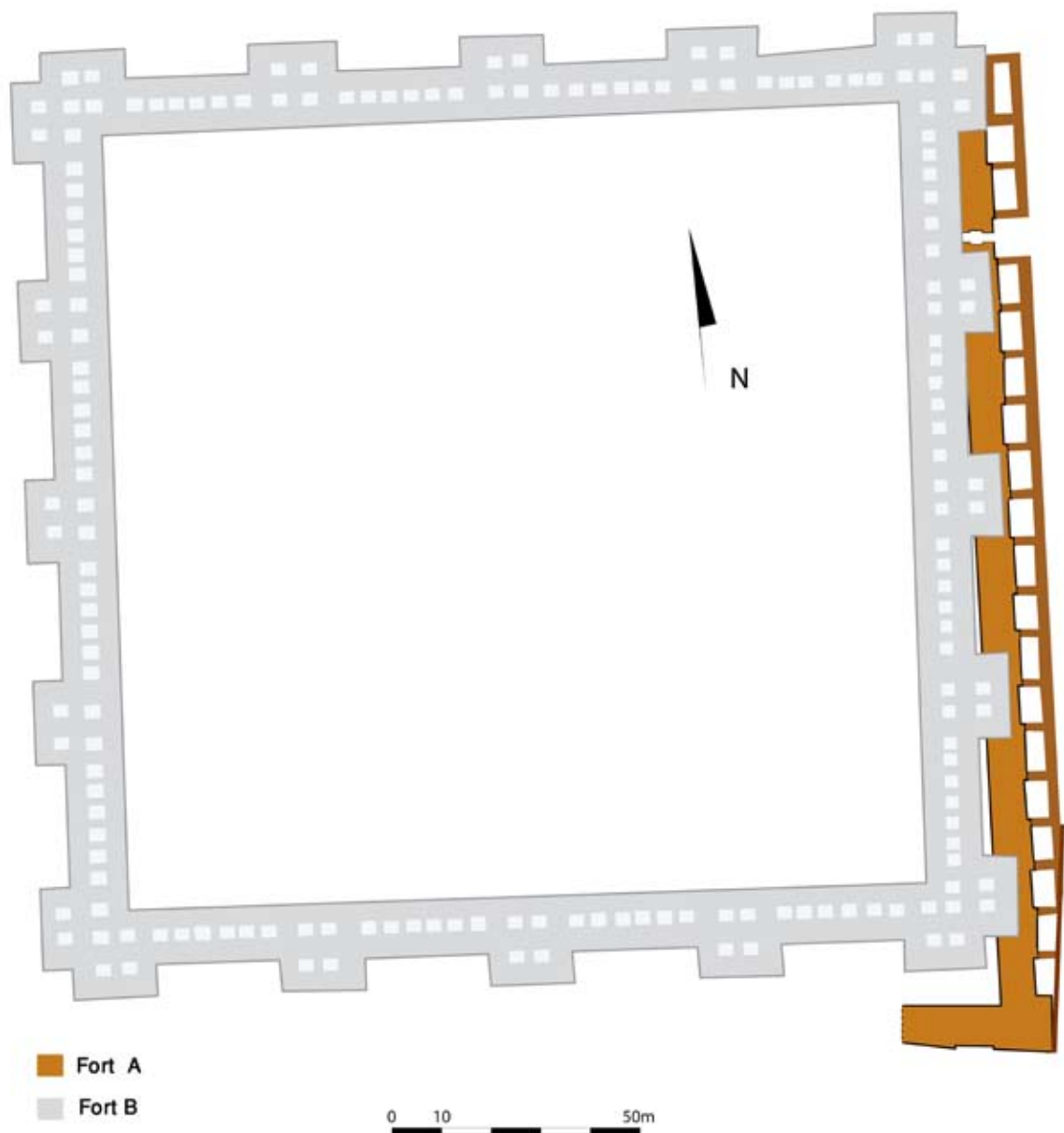
*Fig.8. The south enclosure wall before excavation in 2007.*

<sup>13</sup> Oren, E., *ibid.*, p.10 (fig.3).

towers are added. The eastern wall of "Fort B" has the same number of towers and the same number of casemate chambers in that massive wall and towers, as the western wall (Fig.9).

We labelled the earlier fort "Fort A" - its eastern wall total thickness is 7.10m, which increased to 7.70m at the point where projecting buttresses were added. The thickness of the projecting buttresses is 60.0cm, We were able to uncover the south-east corner of Fort A - its north-east corner being covered by the north-east corner of Fort B. In the later phase the foundation of the Fort A was supported by rectangular rooms filled with pure sand, added to its outer face in order to protect the foundation of the Fort (Figs.10-11).

During the excavation of the massive eastern enclosure wall we were able to find the eastern gate of the earlier Fort A, which is located to the north-east, but unfortunately we were not able to find the gate of the later Fort B. According to the pottery recovered by our mission at Tell el-Kedwa, and during previous excavations at the site, the earlier structure (Fort A) can be dated to the beginning of the Saite Period while the later one (Fort B) is probably dated from the second half of the same period.



*Fig.9. Plan of the two Saite fortresses at Tell el-Kedwa.*



*Fig.10. The eastern enclosure wall.*



*Fig.11. The towers at the south-eastern corner.*



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