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Looting and Archaeological Destruction of the Northern Heritage sites in kharga Oasis

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Abstract
The northern sector of Kharga Oasis, among the five main oases in Egypt, Kharga oasis is the largest one, located in one of the seven depressions of the Western desert, it is containing significant yet remote heritage sites, has been increasingly threatened by looting and destruction since the Egyptian revolution of 2011. This danger persists to the present day, primarily due to the isolation of these sites, located in the far north of the oasis, and the lack of continuous security. This study aims to evaluate the ongoing impacts of looting on these sites, assessing both immediate damage and long-term deterioration to historical remains in these neglected zones. Through detailed fieldwork and analysis, the study identifies key heritage sites affected by illegal excavations and discusses the various consequences of looting on the cultural and historical significance of these sites. In conclusion, the study proposes preventive and protective measures to mitigate further losses and preserve these invaluable aspects of Egypt's heritage.

Keywords: Kharga oasis, heritage, looting, preservation. Risk management.

Introduction
Among the five main oases in Egypt, Kharga oasis is the largest one, located in one of the seven depressions of the Western desert (Dachy et al., 2018, p. 531). It extends 180 km from north to south and between 15-30 km from East to West, with a great escarpment that is bounding it on the Northern and Eastern sides. It is located about 630 km Southwest of Cairo and 220km from the Nile Valley (Fig 1) (Ismael, 2015, p. 6).

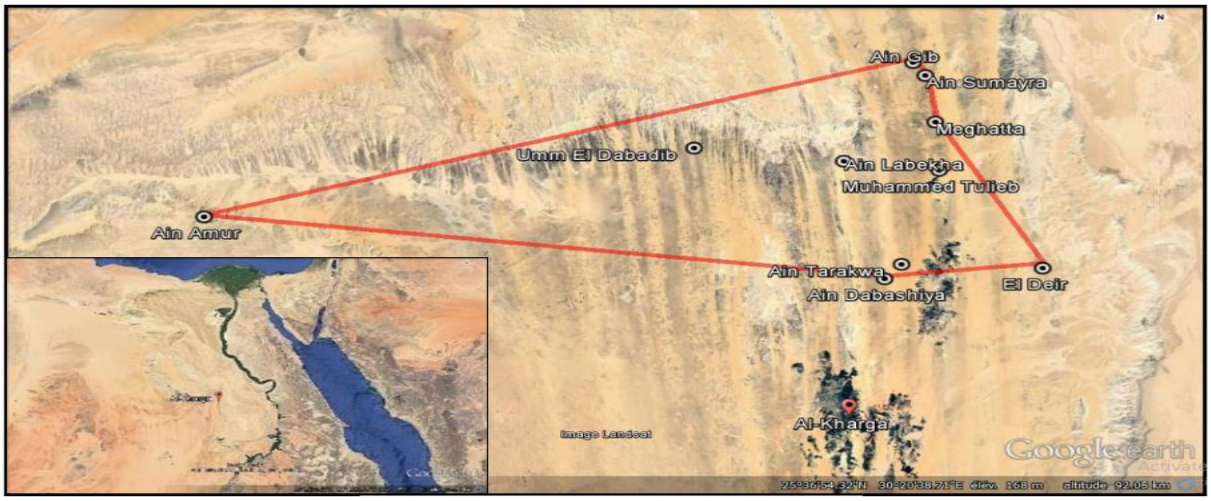


Fig 1. Satellite map to northern area in Kharga Oasis- Google Earth.

Its name means “the outer one” referring to its location. In the late pharaonic period it was known, together with Dakhla oasis, as Kenmet which means the oasis or the southern oasis (Caton-Thompson & Gardner, 1932, p. 369). Toward the late period, in particular, during the Persian rule, it was known as Hibit, then in Ptolemaic time as Hibis, which means plow (Colburn, 2018, p. 97). This name refers to one of the tools used to prepare the land. It is worth mentioning that the name Hibit reflects the prosperity of the agricultural activities in the oasis during the ancient time. Interestingly, the same name has been allocated to one of the most famous temples of the oasis, the “Hibis temple” (Ibrahim, 2012, p. 1; Rossi & Ikram, 2018, p.3).

This paper focuses mainly on the sites that locate in the Northern area of Kharga oasis (Fig 2). This area extends from Ain Gib to the Northernmost Ain Dabashiya in the south (about 27 km), and from El Deir in the East to Ain Amur on the Western side (about 74 km). Indeed, it is not only the geographic aspect that assembles those sites but also the historical periods when the buildings of those sites were constructed. This fact can be clearly seen in certain shared features, e.g. the similarity of the architectural techniques, the underground water system and, the defensive character of the constructions. In fact, most buildings in the Northern area of Kharga oasis date back to the Roman period, more specifically to the IVth century especially the military buildings[1] (Šurinová, 2021, pp. 69-70). However, a lot of archaeological remains from the prehistoric period to the Ptolemaic period have also been discovered in this area (Ikram & Rossi, 2004, p.69).

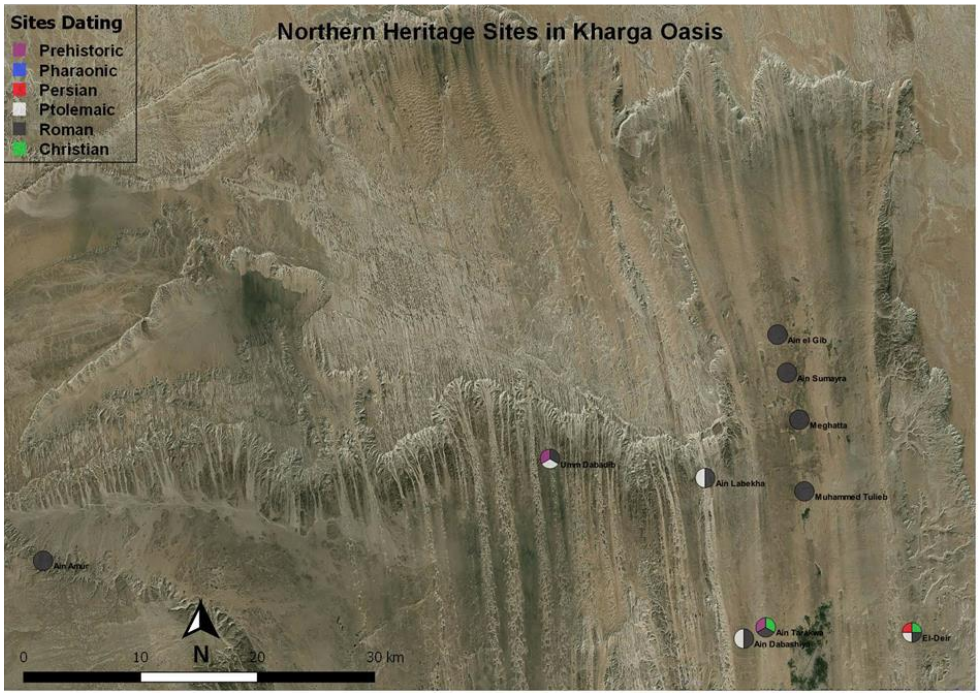


Fig 2. The main sites in Northern Kharga and the dating of their archaeological remains, ArcGIS.

Due to the extensive presence of archaeological sites in this part of the oasis, the early travellers who visited the western desert of Egypt were being interested in visiting those sites and sometimes described them[2] (Ikram, 2019, p.233). Nevertheless, these sites were not being investigated properly until the nineties of the last century. This investigation started when the French team of Professor Dunand had begun the excavation works on one of the Northern sites (Ain Labakha) from 1994 to 1998 (Tallet et al., 2012, p.512). The work moved further

[1] These military buildings were mainly built to observe and protect the ancient caravan routes, which were passing through the Northern side like (Darb Ain Amur, Darb El Ghubary and the Darb El Arbain)

[2] For instance; Frédéric Cailliaud 1818, Sir Archibald Edmonstone 1822, Wilkinson 1825, H. F. Colville 1884, Beadnell 1909.

to the West toward the site of El-Deir and undertook a large study lasting from 1998 to 2009. Another important archaeological project was launched by the NKOS[3] on the Northern sites. They investigated, surveyed and documented more than nine principal sites on the Northern area, in addition to the study of the underground irrigation system which extended between the sites (Rossi & Ikram, 2018, pp. 12-17). It should be mentioned that this study does not attempt to include the riches of all the archaeological sites of the Northern part of El-Kharga Oasis. Rather, it deals principally with ten sites in order to study and check the extent and effects of the plundering activities on the archaeological elements on these sites. Furthermore, seeking and proposing solutions to manage them and mitigate their repercussions. These sites that will be studied in the following part are; Ain Gib, Qasr el-Sumayra, Muhammed Tulieb, Meghatta, Ain el-Tarakwa, Ain el-Dabashiya, Ain el-Labakha, Umm el-Dabadib, Ain Amur and El-Deir.

Objectives

The current study attempts to achieve a set of objectives, including:

- Document and investigate all the changes and the impacts that took place over time in the archaeological sites in the northern Kharga because of the plundering.
- Analyze the magnitude of risk, which would then enable site managers and concerned authorities to plan a more in-depth assessment for the most significant monuments at risk.
- Propose different preventive measures to give the decision-makers and the responsible in the oasis the possibility to choose the appropriate method according to the available resources.

Methods

To achieve the research objectives, this study adopted a multi-faceted approach, employing various methods for data collection and analysis. These methods are structured to ensure a comprehensive understanding of the risks threatening heritage sites in the Kharga Oasis. The employed methods are as follows:

1. LiteratureReview

An extensive review of relevant literature, including scholarly articles, books, and accessible digital resources, was conducted. This step was essential for establishing a theoretical framework and understanding previous studies that address similar risks and challenges. The literature reviews also provided a foundation for identifying research gaps and guiding subsequent stages of the study.

2. Field Survey and Documentation

A systematic field survey was undertaken to assess the current conditions of heritage sites in the Kharga Oasis. This included on-site documentation of physical deterioration and risk factors affecting historical buildings. Data were collected using photographic evidence, detailed field notes, and condition assessment forms to ensure accuracy and consistency.

3.Stakeholder Interviews

Semi-structured interviews were conducted with key stakeholders, including site managers, local authorities, and experts in heritage management. These interviews aimed to gather qualitative insights into the challenges faced in managing risks and to understand the strategies currently in place. The interviews were guided by a predefined set of questions while allowing flexibility for respondents to elaborate on their perspectives.

[3] North Kharga Oasis Survey. This project was in collaboration with the American University in Cairo and Cambridge University.

4. **Application of the Canadian ABC Methodology**

To analyse the impacts of identified risks, the Canadian ABC methodology was applied. This internationally recognized standard provided a systematic framework for categorizing and prioritizing risks based on their severity, frequency, and potential impact on heritage sites. The methodology ensured that risk assessment was both objective and replicable.

5. **Comparative Analysis of International Case Studies**

Case studies of heritage sites worldwide, which have faced similar risks, were analysed to identify effective mitigation strategies. These examples offered valuable insights into the applicability of global practices within the local context of Egypt. The comparative analysis focused on evaluating the feasibility of adapting these strategies to the unique environmental, social, and administrative conditions in the Kharga Oasis.

By employing this combination of data collection and analysis methods, the study ensures a robust and comprehensive approach to addressing the research objectives.

Identify the impacted sites.

Most of the Northern heritage sites in Kharga oasis have no fixed guards to secure their archaeological buildings. The inspection of antiquities in Kharga oasis sends one sentry three times monthly to check most of these sites and record any infringements or vandalism, which means that these isolated sites remain unguarded all the time. The absence of security makes the sites vulnerable to many human transgressions such as:

Ain Gib

In 2011, opportunistic looters demolished the inner western side of the second floor trying to find any treasure behind it. The same thing was reiterated in 2015 but the damage this time was behind the inner side of the Southern gate (Fig 3). In 2012, the robbers dug in the area to the north of the fort searching on the ancient treasures. This excavation revealed a square ancient shaft cut into the bedrock, it was filled with sand. It seems likely that this part might have been used as a tomb. This is support by the human bones and skull found there (Rossi & Ikram, 2018, p.50).

Fig 3. The inner destruction behind the southern gate, Ain Gib. Photo by the author (2024)

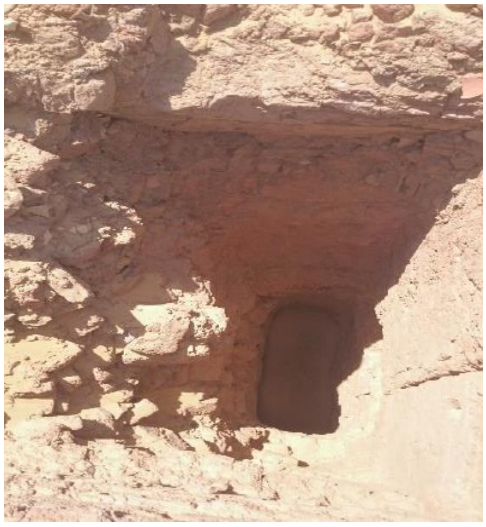
Ain Sumayra

According to the description of Gascou, Wagner, and Grossmann who visited the site in 1979, the fort of Ain Sumayra had three stories: the ground floor and two upper floors. 23 years later, during the first site survey by the NKOS (2001), the archaeologists found only two floors. The third floor has disappeared, most likely destroyed on the hands of the local inhabitants who look for the ancient treasures or

Fig 4. The piles of mudbricks that brought out of the fort by the robbers. Photo by the author (2024)

even used the mudbricks of the ancient buildings in other constructions or for the cultivation activities. Sadly, the violation of the site did not stop there. The report of the second season of the NKOS on the site says: *"Someone removed tons of loose mudbricks from the fort and threw them outside the East face"* (Fig 4) (Ikram et al., 2014, p.77; Rossi et al., 2022, pp. 743-744)

Meghatta



The robbers of antiquities represent the worst risks on this site, they deteriorated different places on the sites especially in the area of the cemetery. Their illegal activities on the site appeared clearly in deep holes scattered throughout the site. One of the worst violations by the robbers in the history of the site happened in 2015 by digging a lot of deep holes randomly in the area of the tombs to the southeast of the site (Fig 5) (Mohamed Hassan, pers. comm[4]).

Umm el Dabadib

Unlike the other sites of the northern sector of the oasis which are being checked by the sentries of the antiquities three times monthly, the checking of this site occurs once every three or four months because of the long distance from Kharga city. The lack of security causes the site to be exposed to the frequent attack by the robbers of antiquities who take the advantage of security lack, and searching for the ancient remains in a random way all over the site (Rossi & Ikram, 2006).

The eastern necropolis of Umm el Dabadib is one of the zones on the site that mostly suffered from continued devastation[5]. The human mummies for examples are deeply deteriorated, dismantled and scattered all over the site. In this regard, we would cite some depressing words from the report of Corinna Rossi who worked in the area; she said *"The site suffers from continuous disturbances: a mummy has been recently dragged out from one of the tombs, her wrappings completely removed and her chest smashed. It is the body of a woman, more than 1.65 m tall, with marked cheekbones and thick lips. The feet are missing and the fingers of the hands appear to have been separately wrapped. It presently lies surrounded by the remains of other mummies consumed by the exposure at a different level, while means that this havoc is just the last of a long series"*(Rossi, 2000, p. 348). Moreover, in 2004, the antiquities looters have caused extensive damage to the eastern side of the temple by driving mechanical digger through the east wall of the structure in search of the ancient treasures beneath the building. It has ruined the main entrance to the temple, which was made of limestone blocks, many of which lie scattered on the ground. They also damaged parts of the eastern settlement, parts of cemetery F along with large parts of the southern and eastern walls of the church (Rossi & Ikram, 2018, pp. 208, 236).

[4] Mohamed Hassan is an Egyptologist and inspector of antiquities in Kharga oasis, interview 2024.

[5] Some of these tombs have been looted, while other tombs were reused in the last century as a storage place, a lot of Bedouin and Arabic writings appear on the walls of some tombs.

Ain Labakha

Although this site has the same security conditions as the other sites on the northern side of kharga oasis (inspection by the antiquities sentry three times monthly), it is more fortunate than the other sites because of the presence of Mr. Sayied Tulieb the sole resident on the site. He is reusing parts of ancient Roman *qanats* to irrigate and cultivate a small part of the land. With the support of the Governor, he has also built a cafeteria and a mini eco-lodge. He also plays the role of the guards on the site to protect it from the robbers of the antiquities (Rossi, 2013). Accordingly, this site is considered one of the protected sites in the northern region in Kharga oasis (Mohamed Hassan, pers. comm).

Muhammed Tulieb

Depending on the interviews with the inspectors of the antiquities in the oasis this site suffered from repeated attacks between 2011 and 2013, especially the southern side where the houses are located (Fig 6). This area is widely damaged by the robbers who destroyed these ancient houses in search of the treasures (Mohamed Ibrahim, pers. comm[6]).

Fig 6. Roman house located to the south of Tulieb fort, has been attacked by the robbers in 2013. Photo by the author (2024)

Ain Amur

Like the other sites in north Kharga, Ain Amur has no fixed guard to protect the archaeological buildings. Even the official inspecting visits occur just twice a year as a result of the far distance of the site. This in turn allow the thieves to mess with the relics of the site. Moreover, the travellers who pass by the route of Ain Amur (from the ancient time) take the site as a resting point in their travel. This justifies the large damage the site witnesses (Rossi & Ikram, 2010, p. 240).

Ain Tarakwa

During the nineties of the last century, a group of looters had driven a heavy vehicle through a part of the northern mudbrick enclosure wall. They advanced toward the temple (Fig7) and destroyed the central and western chambers of the sanctuary in search of ancient antiquities[7]. The same thing repeated after the Egyptian revolution in 2012[8] but this time the violation happened in the area of the necropolis which is located 200 m to the south of the temple (Ikram & Rossi, 2007, p.167).

Fig 7. The destruction of Ain Tarakwa Temple. Photo by the author (2024)

[6] Mohamed Ibrahim is an Egyptologist and director of Pharaonic antiquities in Kharga oasis. interview 2024.
[7] The most of the scattered blocks around the temple seem to have been removed by thieves, especially the decorated blocks (Ikram and Rossi 2007, p. 167).
[8] Information said by M. Mohamed Hassan the antiquities inspector during the visiting of the site in his accompany.

Al Deir

Fig 8. One of the domestic buildings in Al Deir has been destructed on the hands of the looters. Photo by the author (2024)

Unfortunately, this site has a long history of destruction since the First World War (1914-1918). The fortress and the surrounding area were used by British troops as a camping place during their fight against the troops of the Sanusi Brotherhood. This is quite clear from modern graffiti engraved on the walls of the fortress (Tallet, 2014, p. 386). Moreover, it was considered as a resting point for travellers over the years. Like the other remote sites in the oasis, which have no fixed guards, most of the tombs in Al Deir had been completely looted and destroyed. In 2000, the French team recorded the exhumation of two mummies out of their tombs by tombs looters in the northern necropolis (Dunand et al., 2012, pp. 15-17). In addition to the acts of vandalism in the northern necropolis recorded by the same French team in 2005, there are proofs of random digging in different places in this area searching for ancient antiquities. These holes have reached to the ceilings of some tombs on the site and damaged them. They also recorded a wooden sarcophagus in one of these holes. It is very likely that this sarcophagus was left by the looters, probably, because they lacked the time to get it out of the tomb. Furthermore, when the French expedition visited the eastern necropolis (dog's necropolis) for the first time in 1996, they found it in a lamentable state; fragments of human and animal bones, textiles, wood, and shard were scattered everywhere in the area. Some tombs (humans and dogs) had been destroyed and looted. At that time, the inspectors of the Antiquities Service decided to collect these fragments randomly and put them again inside the tombs, so it was normal to find the fragments of one object distributed in different tombs. Seemingly, the violation against the site did not stop at that date. During the return of the French expedition to the site in 2001, they found two tombs (E7, E8) destroyed by the bulldozer of the looters (Dunand et al., 2015, pp. 9, 13-14).

Dabashiya

As the other important sites in the oasis, Ain Dabashiya had permanent guards to protect it and the adjacent site (Ain Tarakwa). However, in 2009 the Egyptian ministry of antiquity reported the restoration of 25 Demotic ostraca have been stolen from the site (Rossi & Ikram, 2018, p. 379). After 2011 the Ministry of Antiquities decided to decrease the number of the guards in the heritage sites of the oasis because of the diminishing numbers of tourists and the lack of financial resources of the ministry. Because of its proximity to Mounira village, it is guarded by a *Ghafer* who lives in that village and checks it every morning. However, the looters tampered with the archaeological remains in the site several times especially after 2011 (Mohamed Hassan, pers. comm.).

Analyzing the risk impact

After examining the north Kharga sites that have been affected by the plundering and destructive activities. The next step is to analyse the impact of this risk on the archaeological remains. This would be fulfilled through quantifying the risk probability of occurrence and its

impact and the loss of value of the heritage assets. In order to do that the Canadian *ABC* tool will be used to estimate the magnitude of this risk.
This tool consists of three components, ***A*** scale measures the frequency of risk happening. This component ranges between 5 the maximum score for events which may happen every year, to 1 minimum for the event which may occur every 10.000 years (Pedersoli Jr, 2016, p. 64).

A score	How many years between events? How many years for the accumulation of a certain level of damage?
5	~ 1 year
4	~ 10 years
3	~ 100 years
2	~ 1 000 years
1	~ 10 000 years

B scale defines the rate of the impact and damage on the heritage assets. This damage can be ranged from 5 as a maximum score, which refers to the total loss, to 1 as a minimum score which refers to an insignificant loss (Pedersoli Jr, 2016, p. 65).

B score	The fraction of the loss of value in the affected items
5	~100 % (Total loss)
4	~ 10 % (Large loss)
3	~ 1 % (Small)
2	~ 0.1 % (Insignificant)
1	~ 0.01 % (Trace)

C score determines the volume of the affected items in the heritage asset. In different words, it helps to know the impact of the risk on the heritage asset entirely. Is it large, small or tiny? The measuring range of C score is the same of other components, i.e. it is between 5 as a maximum score to 1 as a minimum score (Pedersoli Jr, 2016, pp. 70,71).

C score	The percentage of the heritage asset that will be affected
5	~100 % (Total loss)
4	~ 10 % (Large loss)
3	~ 1 % (Small)
2	~ 0.1 % (Insignificant)
1	~ 0.01 % (Trace)

After determining the three components of the risk that can cause a potential loss of value to the heritage assets, now we can easily figure out the magnitude of this risk to help the decision-maker define the level of priority. It can be calculated by adding the scores of the three components (Pedersoli Jr, 2016, p. 88).

The magnitude of the risk (MR) = A + B + C

It is important to keep in mind that risk analysis is an anticipatory process. It depends on some identified data to predict some events in the future to help the decision-maker to apply wise risk management. Therefore, we must think and expect the worst case, the likely case and the best case for each component *A, B,* and *C*. This, in turn, will provide three estimates of the magnitude of a risk: high, probable and low (Michalski & Pedersoli Jr, 2016, pp. 86, 87)

A Frequency or Rate

Low	Probable	High
4	5	5

Depending on; police reports, interviews with the officials, scientific publications that concerned with Kharga oasis as well as the field trips, one can conclude that during the last ten years the northern heritage sites in the oasis have been plundered by tomb robbers several times yearly. Unfortunately, the numbers of these crimes are increasing dramatically over time because of the difficult economic situation. Accordingly, the A component is estimated at 5 degrees.

B The Impact of the Risk on Affected Items

Low	Probable	High
3	4	5

These gangs are usually digging around and sometimes under the historical buildings destroying the structures of the monuments. Moreover, they remove the decorated scenes in the tombs and the temples. They sometimes even use heavy loaders to carry out their digging the matter that, destroys the large parts of the structures. Consequently, the B component is estimated also at 4 degrees for this risk threat on most of the historical elements in the heritage sites by nearly 10 %.

C The Affected Items

Low	Probable	High
4	5	5

As mentioned above, 9 heritage sites out of the total 10 concerned sites in the north sector of the oasis have been plundered (some sites have been plundered more than once in the last years). This number represents 90 % of the total sites. Therefore, the *C* component is estimated by 5 degrees.

Magnitude of Risk

Low	Probable	High
11	14	15

Evaluate the impact of the risk

After reckoning the magnitude of the risks (MR) by estimating the *ABC* components in the analysis step, it is the time to evaluate and classify these risks according to their level of priority. This comparison depends on the score of the risk magnitude. It is categorized[9] into five groups according to their level of priority; catastrophic, extreme, high, medium, low (Kuzucuoglu, 2013, p. 6; Michalski & Pedersoli Jr, 2016, p. 132)

[9] This classification depends on the Canadian model in risk management.

MR	Level of priority
15-14	Catastrophic Priority
13-12	Extreme Priority
11-10	High Priority
9-8	Medium Priority
7-5	Low Priority

The sum of the 3 components in the analytical part is 14 points as a most likely estimate, 15 points as a high estimate and 11 points as a low estimate. By comparing these estimates with the previous risks assessment table one can come to the conclusion that it is a risk with a catastrophic priority (for likely and high estimate), or at the very least estimate is described as a high priority risk. Accordingly, in the next lines, the study will propose some preventive actions and reactive measures to prevent this risk or at least to lower its magnitude to reach to an acceptable level by reducing its frequency speed, as well as reduce its effects.

Recommendations and solutions

- Let's say at the first place that without guard backup in each heritage site, it is impossible to absolutely secure them. All the heritage sites in the north Kharga are left without any kind of security. Such security must be provided by the government. Currently, the military would have to be involved to protect our heritage. These guards whether police, army or civil guards must be well-armed as those gangs have usually sophisticated weaponry.
- Since it is unlikely that permanent guards' points can be placed to protect the archaeological sites in the next few years, it is recommended to appoint security guards that are patrolling all the heritage sites at least twice a week. As most of the heritage sites in Northern Kharga are located inside the desert and are very difficult to access, it is necessary to support the patrollers with four-wheel-drive vehicles to reach them. Unfortunately, most of the patrollers are using their own motorbike to check the sites which makes it a difficult mission to accomplish.
- Inspections of the property should be carried out at regular intervals. It is important to check for any breaches of the protection, the condition of security measures (if it is available) and also the property itself. Additionally, the structure of the property should be checked internally and externally, looking for any traces of illegal excavation inside the border of the historical site.
- If any historical element inside the heritage site has been damaged because of plundering activities, it must be restored as soon as possible. Moreover, if there are any marks of illegal digging it is necessary to cover it rapidly, such as these signs may attract other undesirable attention for other looters who may think that nobody will be concerned if another vandalism and plundering are done (Caton, 2014, p. 20).
- The main road that leads to archaeological sites must be secured by the police or military points to verify the identity of the visitors and to prevent the possibility of transferring any archaeological remains.
- The enforcement of the existing heritage protection law must be strengthened by imposing sanctions on the persons who undertake any kind of illegal excavation around the heritage sites even if they have not found any historical objects, such destructive actions should be deterred (Kono, 2010).
- The plundering incidents are sometimes initiated with the support of insiders such as corrupted customs or border officials, law enforcement officers, and dealers in art and antiquities. So, it is recommended to establish supervisory bodies to ensure the integrity of the employees within the responsible entities for the protection of antiquities.

- It should be made clear where the boundaries of the sites are. This could be carried out by adding a fence or a chain – even a low fence makes a boundary clear. Furthermore, clear signs must be put up to indicate that these areas are archaeological properties (Caton, 2014, p. 20).
- It is particularly important to record information, by carrying out inventories about the contents, the structure, and history of the heritage properties in each site. If the security fails in some way and the buildings are destroyed or ruined, it is of great benefit to have as much information as possible to enable restoration (Caton, 2014, p. 30).
- All the historical sites must be supplied with CCTV (Closed-Circuit Television) surveillance systems to monitor the heritage elements. Systems can use wireless technology, solar power, and modern long-life batteries so that the main power is not required. Lighting also has a key role to play in supporting security operations and site health and safety. However, there are many different types of cameras available, working with low light or infrared operation or combined with white or infrared lighting units.
- It is possible to connect all these cameras in all the heritage sites with a central control room to monitor all historical buildings in the oasis. This room only needs one employee but the supervision must be rotated to ensure that the heritage sites are monitored around the clock.
- It is also possible for the monitoring system to include integrated audio amplifiers and speakers to allow the remote guards to release orders, for instance, to warn invaders to leave a site as he is filmed and he will expose himself to legal accountability (Caton, 2014, p. 41).
- Although the curricula in schools cover Egypt's ancient history, there is limited emphasis on its importance or value, and students receive little exposure to the sites and objects. So, it is recommended to add chapters to the curriculum to make the students realize the social and economic benefits of protecting our public inheritance.
- To use multifaceted approaches for building awareness amongst populations such as inter-sector cooperation and setting up national working groups with all agencies involved in the risk of trafficking the cultural heritage; antiquities inspectors and guards, police, customs, justice, Non-governmental organization[10].
- Launching campaigns of information, awareness-raising, and education to mobilize all members of society in preventing and combating against the illicit trafficking of cultural properties by involving media, social media cultural centres such as cinemas, theatres, and museums[11](Boz, 2018, p. 86).
- Release campaigns to encourage reporting of any form of plundering or illegal excavation inside an archaeological site by local citizens by announcing a police hotline working around the clock to receive any report about heritage looting actions or any suspicious behaviour around the heritage sites. It is recommended to give incentives to these collaborating people.
- Despite the importance of the educational campaigns, in fact, they are obviously not sufficient as there must also be economic benefits for the local society near the archaeological sites. Accordingly, it is recommended to award the major part of the income which derives from these sites to its surrounding community in order to solicit their participation in its security and upkeep (Gozzoli, 2014, p. 44).

[10] See the workshop report, "The protection of cultural goods against plunder, theft and illicit trafficking: actions, implementation and the role of digital archiving", Joint Africa-EU strategy Support Mechanism, Casablanca, Morocco, 9-11 January 2014.

[11] Museum of New Valley in Kharga has a pioneering experience in educating Kharga's society and increasing the archaeological awareness by organizing frequent events mostly targeting school and university students. It is possible to follow its educational activities in its Facebook page https://www.facebook.com/profile.php?id=100009715236068.

- Finally, it is necessary to struggle to stop such illicit trade, because if not, our heritage and history will be in danger of losing a significant part of our priceless heritage.

Bibliography

Boz, Z. (2018). Fighting the Illicit Trafficking of Cultural Property: A Toolkit for European Judiciary and Law Enforcement. UNESCO, Paris.

Caton, A. (2014). Security of Heritage Properties—A guide. British Security Industry Association. https://www.bsia.co.uk/Portals/4/Publications/188-security-of-heritage-property-guide.pdf

Caton-Thompson, G., & Gardner, E. W. (1932). The prehistoric geography of Kharga Oasis. The Geographical Journal, *80*(5), 369–406.

Colburn, H. P. (2018). Pioneers of the Western Desert: The Kharga Oasis in the Achaemenid Empire. The Archaeology of Imperial Landscapes: A Comparative Study of Empires in the Ancient Near East and Mediterranean World, 86–114.

Dachy, T., Briois, F., Marchand, S., Minotti, M., Lesur, J., & Wuttmann, M. (2018). Living in an Egyptian oasis: Reconstruction of the Holocene archaeological sequence in Kharga. African Archaeological Review, *35*(4), 531–566.

Dunand, F., Heim, J.-L., Lichtenberg, R., Boë, L.-J., Duvette, C., & Messili, L. (2015). El-Deir nécropoles. 3, La nécropole de l'Est et le piton aux chiens (Cybèle).

Dunand, F., Heim, J.-L., Lichtenberg, R., Brones, S., Letellier Willemin, F., & Tallet, G. (2012). El-Deir nécropoles. II, Les nécropoles Nord et Nord-Est. Éditions Cybèle, DL 2012.

Gozzoli, R. (2014). Looting At Archaeological Sites and Museums. 22, 33–46.

Ibrahim, B. (2012). Major Archaeological Sites in Kharga Oasis and Some Recent Discoveries by the Supreme Council of Antiquities. The Oasis Papers 6 : Proceedings of the Sixth International Conference of the Dakhleh Oasis Project, *6*, 1–7.

Ikram, S. (2019). The North Kharga Oasis Dharb 'Ain Amur surveys: Past research and future questions. The Oasis Papers, *9*, 1–8.

Ikram, S., & Rossi, C. (2004). North Kharga Oasis Survey 2001-2002 Preliminary Report: Ain Gib and Qasr el-Sumayra. MITTEILUNGEN- DEUTSCHEN ARCHAOLOGISCHEN INSTITUTS ABTEILUNG KAIRO, *60*, 69–92.

Ikram, S., & Rossi, C. (2007). North Kharga Oasis Survey 2004 Preliminary Report: Ain el-Tarakwa, Ain el-Dabashiya and Darb Ain Amur. Mitteilungen Des Deutschen Archäologischen Instituts., *63*, 167–184.

Ikram, S., Tallet, G., & Zivie-Coche, C. (2014). Canine cults in Kharga Oasis: The dogs of Dabashiya. Le Myrte et La Rose: Mélanges Offerts à Françoise Dunand Par Ses Élèves, Collègues et Amis. Montpellier: Presses Universitaires de Montpellier, Collection CENIM, 349–355.

Ismael, H. (2015). The climate and its impacts on Egyptian civilized Heritage: Ei-Nadura temple in El-Kharga oasis, western desert of Egypt as a case study. Present Environment and Sustainable Development, *9*(1), 5–32.

Kono, T. (2010). The impact of uniform laws on the protection of cultural heritage and the preservation of cultural heritage in the 21st century. Martinus Nijhoff Publishers Leiden. https://brill.com/downloadpdf/edcollbook/title/17362.pdf

Kuzucuoglu, A. (2013). Risk Management Strategy for Cultural Heritage. *6*.

Michalski, S., & Pedersoli Jr, J. L. (2016). The ABC Method: A risk management approach to the preservation of cultural heritage (Canadian Conservation Institute).

Pedersoli Jr, J. L. (2016). A Guide to Risk Management of Cultural Heritage (ICCROM-Canadian Conservation Institute).

Rossi, C. (2000). Umm el-Dabadib, Roman settlement in the Kharga Oasis: Description of the visible remains. With a note on 'Ayn Amur. Mitteilungen Des Deutschen Archäologischen Instituts. Abteilung Kairo, *56*, 235–252.

Rossi, C. (2013). Controlling the borders of the empire: The distribution of Late-Roman 'forts' in the Kharga oasis. The Oasis Papers 6, Proceedings of the Sixth Conference of the Dakhla Oasis Project, 331–336. https://www.torrossa.com/gs/resourceProxy?an=4914618&publisher=FZ6430#page=344

Rossi, C., De Troia, N., Pasqui, A., & Migliozzi, A. (2022). Living in a fringe environment: Three Late Roman settlements in the Kharga Oasis (Egypt's Western Desert). Journal of Roman Archaeology, *35*(2), 743–778.

Rossi, C., & Ikram, S. (2006). North Kharga Oasis Survey 2003 Preliminary Report: Umm El-Dabadib. MITTEILUNGEN- DEUTSCHEN ARCHAOLOGISCHEN INSTITUTS ABTEILUNG KAIRO, 62, 279–306.

Rossi, C., & Ikram, S. (2010). North Kharga Oasis Survey 2007 - Preliminary Report: Ain Lebekha and Ain Amur -. MITTEILUNGEN- DEUTSCHEN ARCHAOLOGISCHEN INSTITUTS ABTEILUNG KAIRO, 66, 235–242.

Rossi, C., & Ikram, S. (2018). North Kharga Oasis Survey. Explorations in Egypt's Western Desert (Vol. 5). Peeters.

Šurinová, M. (2021). IS EVERY ROMAN FORT A FORT? PROBLEMS WITH... IDENTIFICATION OF ROMAN FORTS IN EGYPT. DOCTORAL STUDENT CONFERENCE ON ARCHAEOLOGY (IDSCA), 69. https://www.academia.edu/download/75990990/IDSCA_ZBORNIK.pdf#page=70

Tallet, G. (2014). Fragments d'El-Deir (oasis de Kharga) au tournant de notre ère. A propos de Carl Schmidt et de William Hornblower.

Tallet, G., Bravard, J.-P., Guédon, S., & Mostafa, A. (2012). The survey project at El-Deir, Kharga Oasis: First results, new hypotheses. Bagnall et Al, 349–361.

نهب وتدمير آثار المواقع التراثية التى تقع شمال واحة الخارجة

المستخلص

تعتبر واحة الخارجة، هي أكبر الواحات الخمس الرئيسية في مصر، وتقع في واحدة من المنخفضات السبعة في الصحراء الغربية، وهي تحتوي على مواقع تراثية مهمة، وقد تعرضت للتهديد بشكل متزايد بسبب أعمال السلب والنهب منذ أحداث ثورة يناير عام 2011. ولا يزال هذا الخطر قائمًا حتى يومنا هذا، ويرجع ذلك أساسًا إلى عزلة هذه المواقع الواقعة في أقصى شمال الواحة، كما تهدف هذه الدراسة إلى تقييم الآثار المستمرة للنهب والتدمير على هذه المواقع، وتقييم الأضرار المباشرة والتدهور طويل المدى للآثار التاريخية في هذه المناطق المهملة. ومن خلال العمل الميداني والتحليل التفصيلي، تحدد الدراسة المواقع التراثية الرئيسية المتضررة من الحفريات غير القانونية وتناقش العواقب المختلفة للنهب على الأهمية الثقافية والتاريخية لهذه المواقع. وفي الختام، تقترح الدراسة إجراءات وقائية وحمائية للتخفيف من المزيد من الخسائر والحفاظ على هذه المواقع من التراث المصري التي لا تقدر بثمن.

الكلمات الدالة: واحة الخارجة، التراث، النهب، التدمير، الحفاظ. إدارة المخاطر.