

# Faydhat Nayif Archaeological Site, AsSubbiyah, Kuwait: A Discovery of an Ancient Blacksmith Village along the North Shore of the Kuwait Bay, Kuwait

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## Abstract

This paper is a report on a discovery of an ancient human settlement next to the Faydhat Nayif pond in the AsSubbiyah area, north of Kuwait Bay, Kuwait. It also presents a description of the site and its artefacts. The settlement, named by the author Faydhat Nayif Archaeological Site, is composed of two parts, the main cluster of gallery remains and a small satellite, the Sonna Village. The main site contains foundations of around fifty galleries. The state of preservation of the foundations varies from excellent to weak. The dominant architectural plan for the galleries is a rectangle. Infrastructural components associated with the foundations are iron smelters and iron tools. Artefacts include fabricated iron tools, fishhooks and fishnets, pottery fragments, glass shards, and animal bones. The craft of the inhabitants revolves around iron smelting and tool fabrication, and hence, the “blacksmith” status. The research method followed in the research is simple classical surveying techniques utilizing a Brunton compass and a measuring tape. Imaging of the galleries used digital cameras. The settlement displays three styles of construction. The first style is that of a faint triangle, seen mostly in the southern and western sides of the site. The second style shows as a rectangle, with most galleries containing two rooms and external bathrooms. The third style of construction is similar to the second style, except for the presence of wood vestiges and the gypsum lining of the gallery walls. These differences between the three styles suggest three episodes of occupancy. One of the occupancies was by the AsSubbah tribe. The site served repeatedly as a center of population and pilgrim rest area, as well as cultural exchanges in the last 1500 years.

## Keywords

Faydhat Nayif, AsSubbiyah, Kuwait, Archaeology, Settlement

## 1. Introduction

Kuwait is a country that does not possess extensive archaeological archives. Any discovery of an archaeological settlement or remains adds significantly to this archive, and, by inference, to the country's culture and history. Recently, the country started to address its ancient heritage (Frohlich, 1987; Al-Wohaibi, 1999; Poirier, 2005). In the last two decades, accelerated exploration campaigns located many findings, tagged them and catalogued them; examples are (Al-DuWeesh, 2010) and (Al-Wohaibi, 1987). (Al-ALMutairi, 2008) presented a review of the archaeology of Kuwait. The Department of Antiquities and Museums (Kuwait) published in 2006 a summary of its achievements (Department of Antiquities and Museum, 2006).

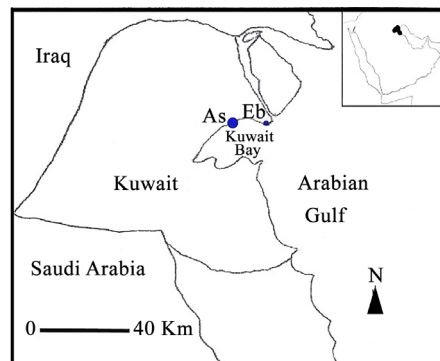
Aside from the National Museum of Kuwait and expeditions from several countries (British Team (Carter et al., 1999), the Slovak team (Benedikova, 2007), the French team (Callot, 2008), and the Danish team (Hoilund, 2009)), only a few individuals (like the present author) are involved in the exploration of past archaeological sites scattered in the desert of Kuwait.

Although many of the sites in the Kuwait desert, some of which archaeological, were mentioned in Arabic poetry and ancient chronicles, a very meagre number of sites has been located and described; only the description of a few of these sites found their way to the published literature.

The author discovered the Faydhat Nayif Archaeological Site (FNAS) in 2015, and it has been under investigation by him since. This paper constitutes the first report on the FNAS. Results of mapping and surveying generated a site map and sampled a collection of artefacts. Therefore, the report is only preliminary. Future investigations will follow to unravel all aspects of the FNAS.

## 2. Location

The location of the FNAS within the regional setting shows in **Figure 1** (inset). The FNAS occupies the land between the high watermark of Kuwait Bay and the Faydhat Nayif Pond (FNP) northeast of it. It hugs the southern shore of the FNP. A narrow and faint dirt car track conveniently splits the FNAS galleries



**Figure 1.** Location of the FNAS in the Ebharah (Eb) area in the AsSubbiyah (As) region in Kuwait (inset).

into two parts, southeastern and northwestern halves. Each half contains approximately an equal number of galleries. Approximately 500 meters separates the main site of the FNAS from the site of the Sonna Village (SV) satellite hamlet to the southeast. The village suffered total destruction, and only some graves testify to its past presence. The low area between the FNAS and SV sites likely contains many gallery foundations, but the sediments of the FNP deposited at high flooding times cover the area. Due to its destruction and consequent loss of information, the Sonna Village will receive only marginal discussion in this paper.

### 3. Relief

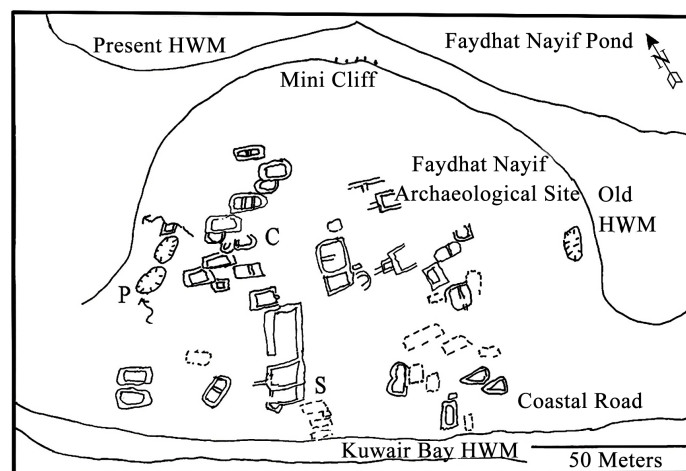
The FNAS stands above a semi-flat surface that slopes faintly to the northeast (2 - 3 degrees slope). This surface is part of the lower foot plain of the Jal AsSubbiyah (Swideg, 2010). The site lies along the southwest shore of the FNP and 200 meters from the high watermark of Kuwait Bay. A well-developed gravel plain separates the FNAS from Kuwait Bay. Surface erosion by rain and sediment transportation in a northeastern direction has preferentially eroded deeper into the southwestern galleries, rendering them difficult to detect and map. The state of preservation of galleries varies from excellent to weak. Recent annual eolian wind episodes have deposited a thin layer of sand sheets and small cross-bedded sand dunes that camouflage the galleries' foundations. Short winter grass (20 cm) grows in the area of the FNAS. It is ephemeral and disappears in summer.

## 4. General Description

### 4.1. Main Galleries

#### Gallery Foundations

The most conspicuous feature of the FNAS is the remains of the foundations of the galleries. These foundation infrastructures form rectangular houses and rooms. **Figure 2** shows a map of the gallery foundations in the FNAS.



**Figure 2.** A map of the foundation galleries in the FNAS, AsSubbiyah, Kuwait. (S for smelter, C for corral, and P for animal pond).

The galleries' layout does not follow a systematic plan, and lacks a robust organizational style; the layout is haphazard. Open areas separate the galleries. Streets are few and narrow. The area of the FNAS measures roughly  $250 \times 250$  meters. The average size of the galleries in the FNAS is roughly  $10 \times 5$  meters. No evidence exists for an external wall for the protection of the FNAS site.

**Styles of constructions:** The FNAS displays three styles of gallery construction. The first style of gallery infrastructure is that of a triangle (**Figure 3**). The length of the base of the triangle is roughly half of its height. Generally, an average dimension of the triangles is 3 meters (base) by 6 meters (length). The walls are thin. No traces of doors are apparent. This style of gallery foundations shows best in the south and west of the FNAS

A very special feature of the first simple style of construction is the absence of associated infrastructure features and artefacts. Interiors of such triangular compartments are barren.

Unlike the other two styles of foundation construction (see below), this first style has a fewer number of preserved galleries.

An interesting facet of this style is the orientation of the triangle base in a roughly N-S direction. The triangle length is oriented roughly E-W, approximately parallel to the path of the sun as it traverses the sky. This is most likely an astronomical sign of celestial significance.

The second style of gallery foundations in the FNAS is the more common geometry for the galleries and the most widespread. It is a rectangular enclosure that contains one to three chambers (**Figure 4**). The southeastern walls have in their middle a door facing mostly southeast, compatible with the dominant northwest wind direction. Dimensions of the galleries are approximately ten by three meters (2 rooms) and five by three meters (1 room).



**Figure 3.** An image of an example of the first style of triangular galleries in the FNAS, AsSubbiyah, Kuwait, showing the upper half and apex of a triangle (lower end of the cane). Erosion removed the rest of the gallery.





**Figure 4.** An image of an example of the second style of galleries in the FNAS, the As-Subbiyah, Kuwait. It shows a 3-chamber gallery and an external gypsum-floored bath-room. The FNP is on the upper right corner.

Adjacent to the external short walls of the galleries are  $2 \times 1$  meter areas floored by gypsum and clay. These are interpreted as floors of bathrooms and bathing facilities. Mimicking the external walls of galleries are thirty-centimetres wide adjacent strips of clays derived from the collapse of the gallery clay-brick walls. A room in each gallery functions as a kitchen and smelting workshop. Some of the more complex galleries include central yards, possibly for audience, reception and function halls.

The third style of gallery construction is similar to the second style, except that the walls show plastering internally and externally by a 1 - 2 centimetres of gypsum. **Figure 5** shows an example of this style. Gypsum provides constant winter warming and summer cooling inside the confinements. Remains of door wood with nails stuck in them show nearby these galleries. It appears that this third style of building is slightly squarer in dimension than rectangular.

Associated with the second and the third styles of galleries are widespread occurrences of iron smelters and iron tool fabrications. One corner of almost every gallery in these two styles of construction has a rounded smelter measuring about one meter in diameter.

The FNAS displays several circular structures (approximately 1 meter in diameter) attached to the outside of some of the galleries. Such structures are vestiges of water wells, baking ovens, shower rooms, bathrooms and outhouses.

## 4.2. Minor Infrastructures

### 4.2.1. Animal Corrals and Water Ponds

Attached to some of the galleries are animal corrals to shelter animals while at home. One of these corrals shows in **Figure 6**. The corrals are mostly circular,



**Figure 5.** An image of an example of the third style of galleries in the FNAS, AsSubbiyah, Kuwait. It shows the internal and external gypsum plastering of the walls.



**Figure 6.** An example of the animal corrals in the FNAS in the AsSubbiyah area, Kuwait.

and one side of the corral lodges against the gallery walls. An outlet door serves as an entrance to the corral. Possibly, as many as fifty heads of livestock found refuge in a corral.

Several artificial animal water ponds occur southeast and northwest of the FNAS. An example of these miniature ponds appears in **Figure 7**. These watering basins measure about 10 meters by 20 meters. Inhabitants of the FNAS carried fresh water from the FNP to these small animal ponds. These basins were used for watering of the FNAS livestock and other herds. They cordoned off the animals from contaminating the FNP by animal urine, dung and faces. This ensured the quality of the FNP, which provides the main source of drinking, washing, and potable water.



**Figure 7.** One example of the animal water ponds in the FNAS in the AsSubbiyah area, Kuwait. The 30-meter long basin is presently filled by sand and desert shrubs.

#### 4.2.2. Refuse Dumps

The FNAS shows a few refuse dumps of different sizes. **Figure 8** displays one of these dumps. The dumps are rounded to lobate and subdued mounds (approximately 20 cm high). Their colour is a distinctive grey colour that distinguishes them from the FNAS landscape. The grey tone results from the abundance of fine-grained fire ash that dominates the dumps. Refuse dumps contain all material leftover by the FNAS daily activities. Types of refuse include broken glass, pottery shards and by-products from the cooking hearths. Other material in the dumps are small and white animal bones, shattered ceramic cups, fragments of domestic and various iron tools. Natural erosive processes have lowered dumps heights and spread them horizontally. Dumps are communal.

#### 4.2.3. Graves

Anomalously, graves are missing from the FNAS. For such a good size settlement, with evidence suggesting long-term longevity (*i.e.* one and a half millennia), graves and other types of burial should be encountered (Uerpmann et al., 2006). However, the search failed to detect the presence of graves or burial mounds. It is possible that dead bodies were transported and buried elsewhere, as practiced by the ancient Dilmun culture (Barta et al., 2008). Alternatively, cremation of dead bodies was the order of the FNAS. Muslims practice neither of these rituals.

Nonetheless, some graves show up in the SV. Mughyairah, to the west of the FNAS, contained some human remains (Soltysiak, 2007). (Parker, 1999) gives a review of death and burial in ancient societies. (Jarman, 1977) described the first millennium BC human remains from Bahrain.

The near total lack of coins in the FNAS suggests the absence of a financial center (*i.e.* bank). This is surprising and may not argue for the FNAS being an





**Figure 8.** An example of a refuse dump in the FNAS in the AsSubbiyah area, Kuwait.

exchange pit stop for pilgrims and commercial caravans passing through the settlement.

### 4.3. Iron Smelting and Fabrication

Beside galleries, iron smelting is the second most characteristic feature of the FNAS. Iron smelting, presence of smelters, and iron tools are widespread. **Figure 9** illustrates one of the smelters. Such manufacturing practices are plentiful throughout the settlement. The numerous iron smelters are indicative of the “blacksmith” nature of the FNAS.

Smelting of iron for the production of various tools gives the FNAS its importance for itself and the local and far markets. Nearly every gallery has its own smelter, and a community smelter is available for members of the blacksmiths who do not own their own smelters. These smelter factories appear as low-elevation (3 centimetres) mounds of smelted iron pieces, usually in a corner of the gallery. The pieces measure approximately two to four centimetres.

## 5. Artefacts

A large assortment of artefacts litters the FNAS, but some of these artefact types are meagre. Most abundant, however, are remains of iron smelters and tools, pottery and glass shards. What follows is a brief description of each type of artefact, and where possible, illustrated by a field image.

### 5.1. Iron Tools

By far, the most abundant artefacts in the FNAS are those related to iron smelting and fabrication (**Figure 10**). Situated on the Arabian Gulf, fishing tools necessarily formed a large component of the smelting ensemble (Al-Thani, 1997). The site shows fishing hooks, nets and spears. It also contains parts of knives,



**Figure 9.** Remains of a rounded iron smelter in the FNAS in the AsSubbiyah area, Kuwait.



**Figure 10.** An outline of a partially-buried fabricated iron container tank produced by the smelting and fabrication activities in the FNAS in the AsSubbiyah area, Kuwait.

swords, pots and other items. Other iron tools include rectangular cans and nails of different sizes. Smelters are essential to cast such tools. Most fabricated tools are presently fragile and disintegrating, and cannot be retrieved intact.

## 5.2. Pottery Shards, Glass Shards and Ceramics

Pottery shards are common features in archaeological sites globally, and the FNAS is no exception. (Wilkinson, 1973) wrote on the pottery of the Early Islamic period and (Hannestad, 1983) described pottery shards from Failaka, a nearby island. A large number of pottery shards ornament the FNAS site (Figure 11). The shards differ in colour, size, thickness, generation and ornamentation.





**Figure 11.** A cluster of pottery shards in the FNAS in the AsSubbiyah area, Kuwait.

They are mostly light in colour. White, beige, grey, pink and light green varieties are common in the FNAS. The shards are mostly fragments of jars. Many of the jars came from afar, but some were produced locally. Many shards cluster around smelting dumps and refuse dumps. Ornamentations appear on necks and rims of some jar fragments.

Glass shards and bottles are widespread in the FNAS (**Figure 12**). Most of the glass shards are fragments of bottles. The shards have different colors. The most common color is green, but blue, dark green and colourless glass shards are also abundant. Some large pieces lack mixing and casting sophistication.

Ceramics appear in the FNAS. Most of the ceramics are small drinking cups. They are mostly white and ornamented on the outside. Many ceramic cups show glazing, and several styles of glazing were applied. Some of these ceramic remains resemble those in the Sabah collection ([Watson, 2004](#)). Sometimes, it is difficult to distinguish between ancient and modern glass shards and bottles.

### 5.3. Home Utensils

The FNAS has a few scattered house utensils (like knives). Many of these tools lost their sharpness and shiny appearance with time. These tools were vital for the daily livelihood in the galleries. Departing settlers removed these necessities from the FNAS when they abandoned it. Utensils lagging behind in the FNAS were probably forgotten.

### 5.4. Fishhooks, Fishnets, and Animal Bones

The FNAS contains fishing hooks and fishnets (**Figure 13**), but does not contain fish bones. Shell midden and shell mounds are absent; in particular, they are absent from the refuse dumps, where they are expected. ([Beech, 2010](#)) discussed the significance of these remains in archaeological sites.



**Figure 12.** Shattered green glass shards in the FNAS in the AsSubbiyah area, Kuwait.



**Figure 13.** An example of fishing hooks in the FNAS in the AsSubbiyah area, Kuwait.

The FNAS settlement displays many small (1 - 5 cm) scattered animal bone fragments, especially in and near refuse dumps (**Figure 14**). Due to their small size, it is difficult to ascertain the identity of animals from which the bones came. (**Beech, 2010**) discussed animal bone remains in the H3 site in the AsSubbiyah area. Transportation processes have relocated the bone fragments in many directions. The bone fragments are fragile and disintegrate readily.

A very peculiar intact animal skeleton appears in the FNAS. Most likely, it belongs to a member of the canine family. The bones are shiny white. This suggests that the skeleton is a recent addition to the FNAS archive of artefacts.

### 5.5. Hearth Rocks and Rock Hammers

Almost every gallery in the FNAS, particularly big galleries with more than one room, has a room dedicated to the kitchen. A pile of classical hearth triple rocks construction occupies a central location in kitchens (**Figure 15**). The three rocks





**Figure 14.** Pieces of animal bones in the FNAS in the AsSubbiyah area, Kuwait.



**Figure 15.** An example of hearth triple stones in the FNAS in the AsSubbiyah area, Kuwait.

support cooking pots during cooking sessions. The local shallow bedrock supplied the necessary rocks.

Rock hammers utilized for crushing and milling are abundant in the FNAS. **Figure 16** shows some of the rock hammers. Several rock types, mostly felsic fine-grained rhyolites and intermediate rock types constitute the rock hammers. The size of the lithic hammers varies from six to twelve centimetres. They are always rounded. Their colours range from reddish to dark green-black tones. Inhabitants collected the hammers from the Pleistocene Dibdibah Formation exposed in the area of the FNAS.

Related to the rock hammers are faceted lithic fragments with sharp corners and edges, used for butchering and skinning of animals. Several such skinning stones occur in the settlement.



**Figure 16.** A cluster of rock hammers with different colours and approximately the same size in the FNAS in the AsSubbiyah area, Kuwait.

## 6. Missing Features

Despite the good appearance and the clear remains of the foundations of galleries, and their robust traces on the ground, many construction materials are absent from the FNAS. Not a single wall remains standing in the site; natural surface processes bevelled galleries flush with the ground. During the abandonment of the site, inhabitants carried with them palm reeds and other ceiling material. Doors and wooden support columns for doors and windows faced the same fate and are no longer present in the site, except for galleries belonging to the third style of foundations. In addition, traces of water skin bags that are necessary for water transportation and supply from the FNP no longer appear in the site. The FNAS remains lack out-house and cesspool facilities.

## 7. Repeated Occupancy

Like many archaeological sites elsewhere, the FNAS galleries display signs of repeated occupancy. Differences in the design characteristics suggest three episodes of occupation. They also suggest three different cultural groups resided in the FNAS at different times.

## 8. State of Preservation

The state of preservations of the different galleries in the FNAS is variable. It is a direct function of the natural erosional processes and anthropogenic activities. Natural processes, such as running water, produce vertical and horizontal transportation and relocation of infrastructural components in galleries. These processes cause the removal of the gallery components and artefacts from their original positions.

Potentially, this material redistribution can confuse interpretations. Wind and



other aeolian activities also contribute to the reduced quality of the appearance of the gallery foundations and artefacts. Anthropogenic destructive processes (**Figure 17**) include digging of falconer holes for trapping of migrating hawks and other migratory birds in their annual migration corridor in the area. In addition, holes dug by desert lizards (dubs) invite people who consider these animals as delicacy to enlarge the holes to catch them.

Desert tent campers also add to the decimation effects of the FNAS, by discarding behind them litter and debris upon their departure from the galleries. Heavy road vehicles took their toll on the FNAS and the accessory Sonna Village. In particular, this was very detrimental for the village.

## 9. People

Who are the people that settled in the FNAS? Did they belong to one cultural group or did they represent more than one cultural group (Whittle, 2003). Currently, the second interval of occupancy seems to belong to the AsSubbah tribe. The tribe may have also populated the third interval; both intervals are close in architectural design of galleries and similar in the ensemble of artefacts and iron smelting products. The first style of settlement reflects a very different engineering layout. It suggests an older cultural group of people, probably of less refined engineering capabilities.

## 10. Sonna Village

The Sonna Village is a small community located about half a kilometer southeast of the FNAS. It is an associated satellite hamlet that served the FNAS needs and supplied it with labour, work force and crafts. Unfortunately, the village underwent irreversible damage; it no longer exists. The SV contained a mosque and a graveyard, enforcing the notion of an Islamic character of the village.



**Figure 17.** Anthropogenic destruction of galleries in the FNAS in the AsSubbiyah area, Kuwait.



## 11. Discussion

General, this paper describes the discovery of the FNAS ancient settlement in the AsSubbiyah area north of Kuwait Bay, Kuwait. It also displays a comprehensive field illustration of the various gallery structures and their artefacts.

The FNAS contains gallery foundations of three architectural styles which represent three cultural groups that inhabited the site. The foundations contain ample evidence for a blacksmith community, as shown by the preponderance of smelters and manufactured iron tools.

The tight clustering of the FNAS galleries, as well as its community smelters, reflect the tight social compassion and solidarity, and assistance of the needy members of the society.

### 11.1. People

The identity of the people who inhabited the FNAS site is unknown, and more than one generation of people may have dwelled in the site. Potentially, three different groups settled in the site, each corresponding to one of the three occupation intervals. The AsSubbah culture settled in the FNAS in the third (and possibly second) occupation interval. Similarities between the galleries of the second and third intervals support this conclusion, but this is uncertain. The first episode of occupation gives no hints to the identity of the occupiers. May be the inhabitants of the first occupation were celestially motivated people following an ancient faith.

The size of the settlement and the well-designed structures are indications that occupancy was continuous for short terms, before the settlement was re-populated. A period of unknown length elapsed between the successive residences. Moreover, the close proximity of the FNAS to a fresh-water source, that probably became inundated semi-continuously, helped in the stability of the site and its people. There are no signs of strictly seasonal (winter or summer) living in the site.

Nations that resided in the FNAS galleries are environmentally sensitive and conscious. The fact that the gallery foundations do not possess redundant construction material, among other evidence, testifies to the awareness of recycling of the natural resources by the FNAS residents. The inhabitants may have likely suffered from shortages of building material and food, and barely had self-sufficiency.

Situated on an ancient pre-Islamic route network made the FNAS a gathering point of cultures. People from central Asia, Persia, Asia Minor, east Africa and the Arabian Peninsula mingled in the FNAS. It is likely that people belonging to the multiple occupations of the FNAS descended from these exotic cultures. Interactions between the different cultures are commercial, faith preaching, political, linguistics, cultural and scientific. For example, (Potts, 1986) discussed the connection between the Dilmun culture in the Arabian Gulf and the Syro-Anatolian nations to the northwest. The present area of Kuwait (e.g. FNAS)

played a significant central role in this connection. (Kepinski, 2007) elaborated on the tribal links between Arabia and the Middle Euphrates at the beginning of the second millennium BC. (Kennet et al., 2011) investigated Early Islamic settlements along Kuwait Bay.

### 11.2. Diet

Insufficient information about the diet of the residents that inhabited the FNAS prevents the assessment of their diet habits. Generally, the FNAS does not provide sufficient diet evidence. Refuse dumps, likely surplus collection centers, contain meagre remains of fish bones and skeletons. The site lacks shell midden, a sure sign for non-sea diet. Presence of fishhooks and nets contradicts this interpretation. This shortage of the evidence for remains of sea resources is surprising, due to the proximity of the FNAS to Kuwait Bay. Consumption of fish and shells constituted only a minor part of the diet of the FNAS inhabitants.

Remains of animal bones do not fare better than sea-derived food. Although many small bones of vertebrate animals are common in the FNAS (Figure 14), larger bones are missing. This suggests that the main provider of meat is small desert animals, and not large animals like sheep and camels.

Staple grains and other organic components of the diet also do not appear in refuse dumps and other places in the FNAS likely to contain such remains. This observation, however, may be a function of the instability of this type of food material with time. The desert sun heat is another reason causing deterioration and disappearance of such organic stuff (Misak et al., 2003). Aside from the animal and fish bones, evidences for much consumption of other types of diets are absent.

### 11.3. Age

The age of the FNAS is unknown. Neither are the ages of the different repeated occupations. Currently, no physical or numerical ages are available for the FNAS.

Speculations on the numerical age are based on the Holy Gurraan. Three verses in the Holy Gurraan mention the name AsSabeen (pre-Islamic name for the modern AsSubbah people). The Holy Gurraan mentions the name in Verse number 62 in Chapter 2 (Al-Bagarah), Verse number 69 in Chapter 5 (Al-Maedah), and in Verse number 17 in Chapter 22 (Al-Hajj).

God revealed the Holy Gurraan 1442 years ago. This places a lower limit of age for the FNAS. It is unknown how far back in antiquity the AsSubbah tribe existed. It is reasonable to declare a general age of more than 1500 years as the age of the settlement, until an accurate age is determined. Animal bones and charcoal found in the FNAS will facilitate the age determinations. Such determinations of the age of the FNAS by radiometric methods are vital for the assignment of time intervals for the occupations in the FNAS. Around it revolves the chronology of the site. The determination of the age of the FNAS will be paramount among all future investigations.

Coins constitute an exceptionally informative artefact in any archaeological site. Excruciating attempts failed to find coins in the FNAS. Inscriptions on coins provide the age of the minting of the coins and the name of the ruling dynasties. In addition, coins are the repositories of numerical benchmark ages of settlements.

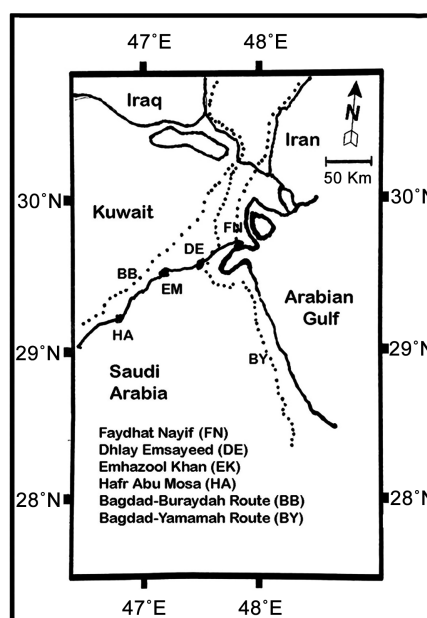
Excavations in the Kathemah area to the west of the FNAS revealed Islamic remains (Skinner & Fitton, 2010), supporting an Islamic age for at least a part of the FNAS site.

#### 11.4. Pilgrim Routes

From ancient times, the Arabian Peninsula has been the criss-crossing of commercial and pilgrim caravans (Karlovsy, 1972; Al-Farhan, 2008). The northeastern part of the peninsula has several well-known routes that intensified after the advent of the Islamic faith. (Potts, 1986) outlined most of these caravan routes.

I have constructed an additional subsidiary route that extends along the northwestern Arabian Gulf and the western border of Kuwait. It travels from southern Iraq to the holy cities in western Arabia (Figure 18). This additional route passes through the FNAS, Dhlay Emsayeed Khan (Al-Mishwat, in preparation), Emhazool Khan (Al-Mishwat, 2005, 2007), and Hafr Abu Mosa (Hafr El-Batin), Saudi Arabia.

The FNAS acted as a rest area, supply center, and pit stop for exchange of goods carried by commercial caravans and pilgrimages travelling this route. The route also served as a path for ancient military campaigns through this part of the Arabian Peninsula.



**Figure 18.** The established pilgrim and commercial routes in the northeastern part of Arabian Peninsula (Potts, 1986) (dotted line) and the subsidiary route constructed by the author in this study (solid line). The new route passes through the FNAS in the AsSub-biyah area, Kuwait and the DE, the EK, and the HA, in its way to BB in Saudi Arabia.

## 12. Conclusions

I conclude this research paper by summarizing the most salient aspects of the FNAS, an archaeological site discovered recently by the author north of Kuwait Bay, Kuwait. The site shows gallery foundations that display three distinct structural styles. Each style potentially belongs to a different group of site inhabitants. Inhabitants of the site were involved in iron smelting and fabrication. Many iron tools, pottery shards, and glass shards comprise the FNAS artefacts, among other remains. The FNAS served as a blacksmith community along the pilgrim's route to the Holy places in western Arabia.

Inhabitants of the FNAS likely belong to the different nations of the Middle East. The younger (*i.e.*, third) style of galleries was settled by the AsSubbah wandering tribe of Arabia. Indirect evidence from the Holy Gurraan places 1442 years as a minimum age for the FNAS.

Much research will ensue in the future. It will explore the many facets of the FNAS. It also will address many of the contradictions posed by the present state of knowledge on the site.

## 13. Future Investigations

Being a discovery, the FNAS (and the Sonna Village) do not have references in the literature. Future research will follow to address the various aspects of the FNAS. Among the facets targeted for investigations are the age of the site, the identity of cultures that occupied it, inspection of the iron smelting profession, diets of the people, ethnicity and faith of the people, and comparison with other sites in the region. Scouting for other archaeological settlements will intensify. The grave burial aspect of the FNAS is presently enigmatic, and awaits investigations.

Currently, technically oriented investigations of the FNAS are under consideration. Paramount among the lines of studies is age dating of the FNAS by the C14 radiocarbon method, and delineation of the age of different episodes of settlements. Future research involves also AUTOCAD mapping of the gallery structures to create an accurate map of the site. GPR studies on a highly sophisticated ground plan will help unravel the shallow subsurface beneath the FNAS.

An anthropological investigation of the site will provide additional information that will enrich the history of the area.

This paper serves as a basis for future studies on the FNAS multitude of aspects. A team of specialized researchers, supported by requisite funds, working according to a long-term plan, will lead investigations to a satisfying wealth of information.

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## Conflicts of Interest

The author declares that the research has no conflict of interests.

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