

# A Preliminary Survey of the Archaeology of the Wadi Safad, Fujairah, United Arab Emirates, 13-15th April, 1995

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## Introduction

Fujairah (*Cl. Ar. al-Fujayra*) [1], the capital city of the Emirate of Fujairah, is one of the seven constituent Sheikdoms of the United Arab Emirates, and the only Emirate whose coastline is entirely situated on the Gulf of Oman. Fujairah territory does, however, extend westwards as far as the village of Habhab, near Khatt. Like the other northern emirates in the mountainous area of the Hajar Mountains, Fujairah is far more fertile than the country further west, for the highlands enjoy a relatively heavy seasonal rainfall. On either side of the Jebel Hajar, major wadis descend through the mountains, carrying flood water to the adjacent plains.

To the north of Fujairah is the Musandam Peninsula, the Ru'us al-Jibal territory of the Sultanate of Oman. Fujairah is also bordered on the coastal plain by enclaves of Sharjah at Khawr Fakkan, Kalba and, in the north, Dibba; further south is the territory of Oman proper. From Dibba southwards, the Batina coastal plain gradually widens through Fujairah and the Sharjah enclaves into Oman: the coastal plain is semi-tropical, and differs to some degree from the coast on the western side of the Hajar Mountains, which lies largely in the Emirate of Ra's al-Khaimah, on the Arabian Gulf side of highlands. The villages and hamlets in the valleys and on the high plateaux are characterised by stone buildings and field terracing [2].

Fujairah's archaeology was not investigated until Beatrice de Cardi included the area in fieldwork that she carried out in February, 1968 [3]. Subsequently further survey and excavation at al-Bithna and Husn Madhab was carried out by the Swiss-Liechtenstein Foundation for Archaeological Research Abroad in 1994 [4]. Excavations were also carried out at al-Bidiyya by Dr W. al-Tikriti of the Department of Antiquities and Tourism in Abu Dhabi's Eastern Region [5] and later at al-Qidfa, the latter being thus far unpublished.

The work of these teams, and work elsewhere subsequent to the date of the survey reported here, including excavations by the University of Sydney, under the direction of Prof. D.T. Potts of an Iron Age fort at Awhala and of a Wadi Suq tomb from Sharm, revealed important tombs and other sites of Bronze and Iron Age date [6].

Much of this fieldwork concentrated on Fujairah's early antiquities. In recent years, however, extensive work has been undertaken by a Sydney University expedition under the direction of Prof. Potts on the archaeology of the Islamic period. This work has included surveys of coastal sites and of petroglyphs, a survey of the palace in the Wadi al-Hayl, a survey of copper mining sites, many from the Islamic period, and preliminary excavations at the site of a Portuguese-period fort at al-Bidiyya (*see Page 19*)

Fujairah has a number of important sites from the Islamic period. In the north is Dibba, a settlement which predates Islam. It is associated with Al Julanda, the 7th C. AD rulers of Oman, who were the first rulers in the region to accept Islam. In the Ridda wars, the Muslims put down a rebellion at Dibba where the graveyard associated with the battle is still shown outside the modern town, in Omani territory. For the later Islamic period, the best known monument in Fujairah territory is the mosque at al-Bidiyya; there are also a number of fortresses and fortified buildings in Fujairah city, at al-Bithna, at Awhala, at Wadi Hayl and at al-Bidiyya itself [7], for example. Other fortifications date from the Portuguese period, recorded in varying degrees of detail

in 16th and 17th century maps [8]. The Fujairah forts have yet to be studied in detail [9].

## The Wadi Safad [10]

Several valleys descend eastwards from the mountains to the Batina coastal plain; among these is Wadi Safad, in the southern part of Fujairah territory. The Wadi is 10.7 kms north of Fujairah city, and just inland from the coastal village of al-Qurayya [11]. It is one of two wadis that flow down to the coastal plain at this point: of these, Wadi Safad is the more southerly, while a second valley, Wadi al-Thayb (Theeb), lies to the NW of al-Qurayya. Immediately north of al-Qurayya is the rocky outcrop of Jebel al-Qurayya. The fan onto which the two wadis flow opens out to the east on to the coastal plain, to the Sabkha Murbah to the north and to the Sabkha Masfayt to the south. The asphalt road running north from Fujairah to al-Qurayya and Khawr Fakkan traverses the coastal plain.

The Wadi Safad flows from the west, between high mountains, collecting water from the Jebel Hajar before it broadens and debouches onto the fan inland from al-Qurayya. The flood channel winds through a boulder-strewn landscape that characterises the course of the lower Wadi Safad. There is evidence of considerable erosion from the mountain sides. At the time of the 1994 survey, a graded unpaved track from al-Qurayya was motorable through the Wadi for over 10 kms from the asphalted Fujairah/Khawr Fakkan main road. The unmetalled track was widened and asphalted in May 1994, and this work has since transformed the Wadi in its lower course and affected sites described here [12].

The site of the old village of al-Qurayya, at the mouth of the wadi, (Site FS 2) has now been used for the building of a new village, and the site recorded here has disappeared. There has also been extensive disturbance immediately inland of the village, in the area of Site FS 3.

However, in April, 1994, the Wadi Safad had not been much affected by development. Modern buildings were concentrated in the large village of al-Qurayya, with some at the village of Safad at 6.9 kms along the narrow higher course of the Wadi. At 10.5 kms the motorable track stopped at another small hamlet.

Settlement in Wadi Safad was sustained in the past by water tapped from springs in the mountainsides. Examples of this process are represented by a still functioning ancient *falaj* (FS 19), and a blocked *falaj* (FS 16). We were also shown dry water channels that related to an abandoned irrigation system. It is said by the present inhabitants of the wadi that the available water in the Wadi Safad has declined in recent times. Based on these water sources, Wadi Safad supported the numerous terraced gardens and palm-groves which run along the valley above the level of the flood channel. Many terraces had been abandoned by 1994, but the past extent of cultivation in Wadi Safad was obvious everywhere. Although we did not ascend the mountains, we were informed that on the summits are flat areas which were formerly farmed. According to our informants, the high farms are now largely abandoned. There are numerous terraced farms on the high plateaux all over the Hajar range and those above Wadi Safad are clearly of the character of those recorded elsewhere. Dostal has given an account of the architecture of similar mountain farmsteads in Ra's al-Khaimah [13], while Costa has described farms and their architecture further north in Ru'us al-Jibal in Oman [14].

## Methodology

Inspection of sites in Wadi Safad in 1994 was entirely visual and non-destructive. No finds were removed from the sites and where sherds were photographed, this was done with the sherds *in situ*. No groups of sherds was gathered together for photographic purposes. Our intention was to preserve the integrity of sites for future research.

## The Archaeology of the Wadi Safad

The oldest archaeological sites noted in the Wadi consisted of a series of stone cairns which are of pre-Islamic date. They recall the cairns and tombs in southern Ra's al-Khaimah at Wadi al-Qawr, although a parallel might also be made with the Wadi Suq graves further south near to Suhar in Oman. These stone mounds were accompanied by little or no pottery. In the short time available to us we noted six stone mounds either on the fan (FS 3, FS 4) or to the sides of the track through the Wadi (FS 5, FS 6, FS 7, FS 9). Those on the fan appeared to have belonged to the group noted by De Cardi in 1968, but those within the Wadi Safad valley do not seem to have been recorded hitherto. We were told by Mr 'Ali Ahmad, a resident of the Wadi, that there were other stone mounds of this type in the Wadi Safad.

We noted no Early Islamic sites, although according to a local legend, a king of Persia once built a great dam in the Wadi. There is no suggestion as to when this occurred, nor is there any trace of a monumental dam. The local people recognise that this may be a folk memory of the distant Sassanian period, although "Persian" armies were also present in the region at various times during the Islamic era.

Although no Early Islamic pottery was found, it must be stressed that examination of the surface was visual, and only dealt with surface sherds. Given the erosion movement of gravels off the hillsides, it is unwise to attach too much significance to the absence of early finds on the present surface. Experience in a similar environment at Wadi Haqil in Ra's al-Khaimah in 1992

shows that earlier sites tend to become masked, buried deep under the eroded material from the hillsides, and this may have happened in the Wadi Safad. However, cairns FS 3-FS 7, which are obviously of considerable age, indicate that in that part of the Wadi at least, the present surface is the same as it was in much earlier times.

There are a number of structures and terraced field systems related to the Later Islamic period which suggest a larger settlement and population within the past 500 years or so than at present. Mr 'Ali Ahmad told us that there is a local belief that, in the past, the Wadi supported a far larger population (a view probably based on the number of abandoned field terraces, houses and Islamic graves). In the more recent past, Friday prayers and Eid prayers were held at Safad. Today, Eid prayers are held at al-Qurayya or Fujairah instead rather than Safad. The decline of Safad is associated with the diminution of water flow in the springs of the valley, which has been happening in living memory.

The view of the local people is that the current population has been settled in Wadi Safad for some two hundred years but they have no sense of connection with the numerous abandoned Later Islamic sites along the Wadi: they do not have any tradition that their forefathers lived in them. The origin of these Late Islamic sites is thus a matter of some mystery at present, although there may have been some disjuncture of collective local memory.

The Later Islamic presence is especially characterised by field terraces, defined by stone buttressing with associated irrigation systems. The main structures in the Wadi Safad of Later Islamic date include a fortified *husn*, a neighbouring mosque, and a variety of houses and store-structures. Houses include stone-built winter houses which survive only as stone foundations and stone walls rising about a metre. There would have been a single door in the narrow end of each of these houses. Roofing on these low stone walled structures would have been reed gabling resting on the stone foundations. By contrast, summer houses were much more fragile: square, level roofed structures, with a *hasir* cover of



Plate 1: Tower (Site FS-1) on the edge of the village of al-Qurayya

palm matting [15]. The local accounts imply that the Later Islamic sites of the valley fall into a period preceding the 18th century and the numerous scatters of Islamic period sherds that we noted in the Wadi Safad sites fall quite appropriately into the Julfar horizon, suggesting a ca 16th C. -18th C. date range. Sherds present included Julfar-type red painted unglazed wares, Julfar-type unglazed undecorated sherds, incised white-wares and glazed Persian imports.

### Gazetteer [16]

Distances are measured from 0 kms at the turn off by a blue Safad road sign at al-Qurayya which was in place at the junction with the main coast road in April, 1994. Distances have changed with the building of the new road to and through Wadi Safad, which provides a new route of access, skirting to the south and west of the old village of al-Qurayya (Site FS 2). Many of the buildings of the old village have subsequently disappeared as a result of the building on the same site of a new village, following heavy flooding of buildings adjacent to the main road in winter 1997-1998.

FS 1  
Tower  
2 kms  
Plate 1

There is a mud-brick and stone tower north of the track. It has massive collapse revealing round wadi stones used in the wall structure. The tower measures 5.8 m. E.-W. x 6.00 m. N.-S. A mud-brick building lay to the NW. To the south is a palm plantation. There is a late Islamic pottery scatter in the area of the tower.

FS 2  
Village  
2.3 kms  
Plate 2

To the south of the track is an extensive village of

gable-roofed houses, all deserted and now roofless. The houses recall buildings on the island of Ghagha' in the Western Region of Abu Dhabi Emirate [17].

FS 3  
Cairn  
3.3 kms.

This cairn of rounded, selected wadi stones lay 79 paces south of the track. It was a sub-circular cairn, measuring 4.4 m. NW-SE / 2.75 N.-S., and 1.20 m. in height. Two rows of stones formed a parallel row through the central area of the mound. B. de Cardi had noted this same feature in cairns near al-Qurayya [18]. The cairns of Wadi Safad deserve comparison with cairns at Wadi Suq north of Suhar in Oman and others at Wadi al-Qawr in southern Ra's al-Khaimah.

FS 4  
Cairn  
3.3 kms  
Plate 3

The cairn lay 35 paces south of the track. It had collapsed and was damaged, forming a circle of rounded boulders, measuring 4.40 m. N.-S., 4 m. E.-W. It is of the same character as FS 3.

FS 5  
Cairn  
5.9 kms

This was a circular stone cairn of rounded boulders, located 82 paces south of the track. The cairn measured 7.1 m. N.-S. x 7.1 E.-S. and was 80 cms-1 m. in height. There was a raised outer circle with an inner ring of collapse masonry.

FS 6  
Cairn  
6.1 kms

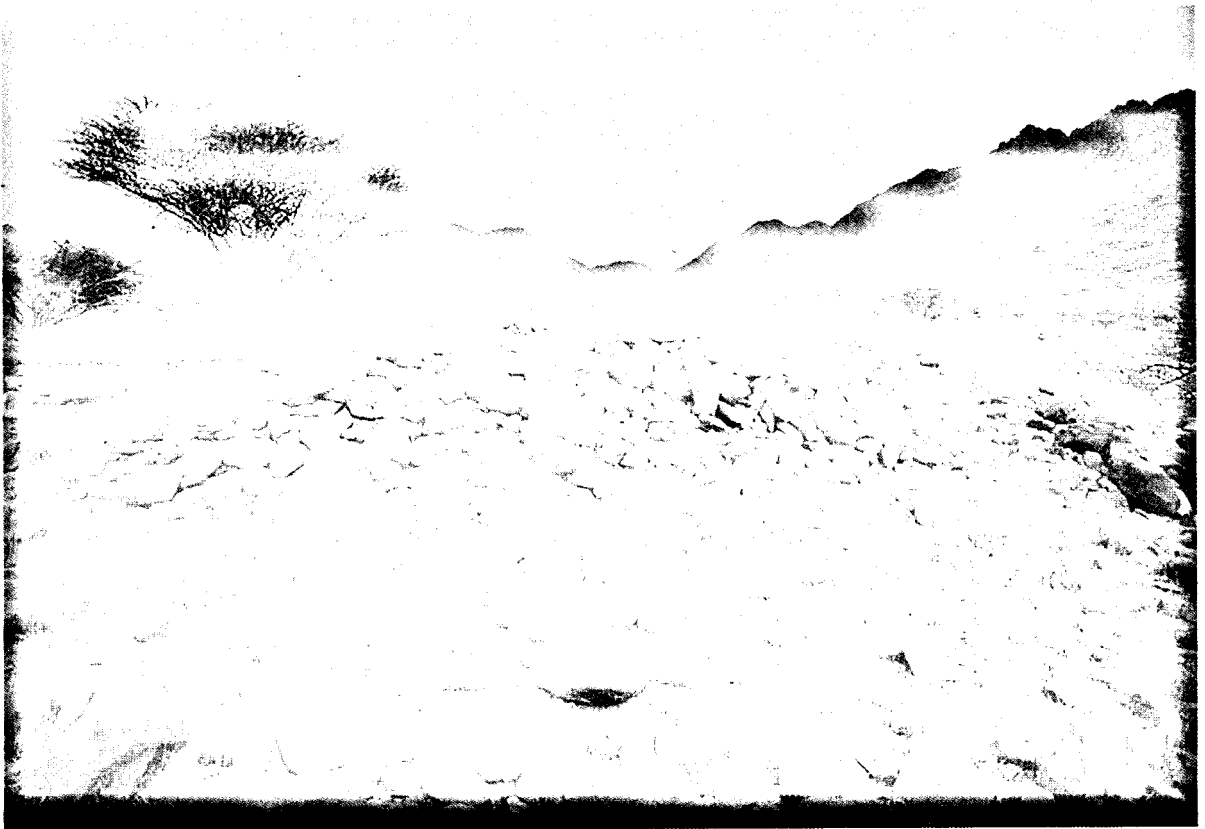
A circular cairn of rounded boulders, 51 paces south of the road, measuring 9.1 m. N.-S. x 8.4 m. E.-W.



Plate 2: Buildings in the old village of al-Qurayya (Site FS 2)



**Plate 3: Site FS 4, a collapsed cairn of wadi boulders**



**Plate 4: Site FS 7, a sub-circular stone cairn**

FS 7  
Cairn  
6.45 kms  
Plate 4

A sub-circular stone cairn, 15 paces south of the road, measuring 7.1 m. N.-S. x 9.7 m. E.-W.

FS 8  
House  
7.25 kms.

A stone house, formerly with a gabled roof, set on the bank above the Wadi bed, 70 m. north of the track, and north of the flood channel. It measures 5.3 m. x 2.4 m.

FS 9  
Stone mound  
7.25 kms

This mound is situated immediately NE of FS 8. It is a rectangular mound of rounded stones measuring 5.4 m. x 2.7 m.

FS 11  
Field terraces  
7.65 kms  
Plate 5

A group of abandoned field terraces lying south of the track. They have not been farmed in the memory of local people. They are probably to be associated with the other deserted Later Islamic sites and structures in the Wadi Safad

7.7 kms.  
To the north of the track are terraces and retaining walls. Later Islamic Julfar painted pottery and related Late Islamic local wares were noted here.

FS 12  
Houses

7.7 kms

Stone house foundations lie to the south of the road and measure 3.65 m. x 2.45 m. They are set on a SSE-NNW. orientation. There is a single doorway at the SSE end.

FS 13  
Water channel  
7.7 kms  
Plate 6

To the north of the track is a disused water channel that fed the abandoned Late Islamic field terraces. It runs from the western upper end of the Wadi Safad and descends eastwards. It is to be associated chronologically with the Late Islamic field terraces.

FS 14  
House  
7.7 kms

Stone house foundations lie to the north of the track near terraces; the foundations measure 3.5 m. x 2.05 m. There is a single doorway at the east end. It is to be attributed to the Later Islamic period.

FS 15  
Structures

Stone house foundations to the north of the track near terraces. They measure 3.6-3.7 m. x 2.05 m. There is a doorway to the east. The house is attributed to the Later Islamic period.

FS 16  
*Falaj*  
7.95 kms.

A blocked *falaj* lies to the north of the terraces and of the flood channel of the Wadi Safad. It included a plaster (*juss*) lined water tank that provided a catchment below



Plate 5: Field terraces in the Wadi Safad (Site FS 11)

the *falaj*. It was already destroyed when we saw it in April, 1994. We were told by 'Ali Ahmad that formerly there had been a rock cut *falaj* here, comparable to FS 19.

FS 17  
Courtyard house  
8.2 kms

A courtyard house lies to the south of the track. It was still occupied in 1994. It included a reed (*'arish*) hut and a stone hut. There was also a garden and a palm grove.

FS 18  
House  
8.8 kms.

Ruined house structure.

9.1 kms  
Terraces to the north of the track.

9.3 kms  
Palm groves.

FS 19  
*Falaj*  
10.15 kms  
Plate 7

The mouth of a *falaj* channel was noted, with extremely well cut masonry forming a rectangular opening, with a channel cut back into the mountain on the north side of the Wadi Safad. The date is unknown and there were no finds in association with the *falaj* but it is almost certainly ancient. The cutting of the masonry is superior to any work seen in the region in more recent times. It still has a flow of water which feeds into a pool below the *falaj* outlet.

FS 20  
Mosque

9.5 kms

A mosque is located to the SW of the track at the northern foot of a hill surmounted by a fortress (*husn* FS 22). The mosque is ruined and no longer in use. Its *qibla* is at 259°. It is stone built, and now roofless. There is a single door on the east side, with a central *mihrab* recess which is curved on the interior surface and squared on the exterior. The overall E.-W. internal measurement is 8.05 m. and 9.15 m. with the *mihrab* included. The mosque has a maximum width N.-S. of 5.73 m. It includes a summer mosque to the east which was once covered in palm thatch, with rectangular openings in the walls to provide natural air-conditioning. The winter mosque occupies the west side towards the *qibla* wall and the *mihrab*. The roofing of the winter mosque is now lost. The mosque is to be associated with the Later Islamic period of settlement. It seems likely that it is older than the past two centuries or so, for it is not remembered as having been in use in recent times.

FS 21  
Structure

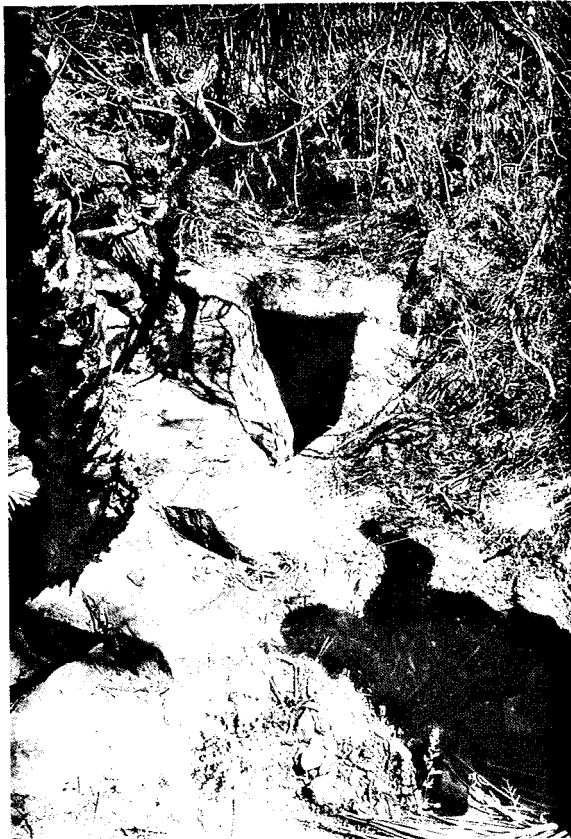
This stone structure served as a store room (*makhzin*, *mastawda*) for grain or dates. It is situated to the SE of the mosque.

FS 22  
*Husn*  
9.5 kms  
Plate 8

To the SW of the track is a *husn* on the summit of a hill that dominates the valley and the track at this point. One local estimate suggests that this fortification is 90 years old, but another suggestion dates it to over 200 years ago. This latter view seems more plausible. There is Julfar horizon pottery and glazed Persian imports (Plate 9) scattered around the interior of the fortress and on the SE and south slope in FS 23 (a graveyard site). The



Plate 6: Disused Late Islamic water channel (Site FS 13)



**Plate 7: Mouth of a falaj cut into the mountain (Site FS 19).**



**Plate 8: Husn Safad, the Late Islamic hill-top fort. Site FS 22**

fortification consists of a larger tower to the north, and lesser towers with defensive parapets around the perimeter. There is also a well constructed walk-way around the parapet on the southern-western side of the *husn*. In the open area between the towers and walls, there is a fine *juss* plastered tank to collect rain water.

FS 23  
Graveyard  
9.5 kms

On the south and SE side of the *husn* hill are a very large number of Islamic graves, all associated with the inhabitants that preceded the present population, according to the local people. In many cases, there is an individual terrace for each grave. The graveyard is no longer in use. Sherds found at the site belong to the Julfar horizon and include Persian imports of the same period.

**(Sites FS 20 - FS 23 have subsequently been studied by Longden and Garfi, see Editors' Note at end).**

9.5 kms-10 kms  
Plate 9

The Wadi Safad opens out to a broader plain with cultivated fields. This is the main agricultural area along the Wadi with a number of farms.

10 kms.

The Wadi narrows beyond the field system, flanked by field terracing.

10.1 kms.

Terracing continues until the end of the motorable track. We did not examine the Wadi Safad beyond this point and the results of further survey are awaited.

### Acknowledgements

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Mohammed Al Sharqi, UAE Supreme Council member and Ruler of Fujairah, for giving permission for the survey to take place, and for arranging for the necessary support from authorities in Fujairah. Saif al-Attar, then Director of Antiquities and Heritage for Fujairah, helped with logistic support, while transport was kindly provided by the Abu Dhabi Company for Onshore Oil Operations, ADCO, within the framework of its support for the Abu Dhabi Islands Archaeological Survey, ADIAS. The original proposal for the survey was made by ADIAS Executive Director Peter Hellyer, who also undertook the necessary discussions with the Fujairah Government.

### Notes

1. J.G. Lorimer, *Gazetteer of the Persian Gulf, 'Oman and Central Arabia*, 1908-1915. Calcutta.
2. The most useful description of this environment and architecture appears in W. Dostal, *The Traditional Architecture of Ra's al-Khaimah (North)*, Wiesbaden (1983).
3. B de Cardi, "Archaeological Survey in the Northern Trucial States", *East and West*, vol.21, Nos. 3-4 (Sept.-Dec.1971). pp. 225-289.
4. P. Corboud, A.-C. Castella, R. Hapka and P. Im-Obersteg, "Archaeological Research in the Emirate of Fujairah in 1994". Unpublished report to the Government of Fujairah.  
and  
P. Corboud, A.-C. Castella, R. Hapka and P. Im-Obersteg, "Archaeological Survey of Fujairah" 3, Swiss Liechtenstein Foundation for Archaeological Research Abroad, Berne, Vaduz, Geneva and Neuchatel (1994).
5. W.Y. al-Tikriti, "The Excavations at Bidya, Fujairah: the 3rd and 2nd Millennia BC culture", *Archaeology in the United Arab Emirates V* (1989), pp. 101-111.
6. Apart from the above, see also P. Hellyer, *Fujairah: An Arabian Jewel*, Dubai (1990); P. Hellyer, "Iron Age Fort in Fujairah", *Tribulus*, Bulletin of the Emirates Natural History Group, Vol. 3.2 (October 1993), p. 17; P. Hellyer, *Hidden Riches: An Archaeological Introduction to the United Arab Emirates*, Abu Dhabi (1998); Potts, D.T., Weeks, L.R., Magee,



Plate 9: A view of Wadi Safad from the *husn* (Site FS 22)



- P., Thompson, E. & Smart, P. Husn Awhala: A late prehistoric settlement in southern Fujairah. *AAE* 7: 1996: 214-239; Petrie, C. The Iron Age fortification of Husn Awhala (Fujairah, U.A.E.), *AAE* 9: 1998: 246-260 and Barker, D.E. *A Typological and Scientific Analysis of Wadi Suq and Iron Age Period Ceramics from Fujairah, United Arab Emirates*, BA Honours thesis, Univ. of Sydney, (1997).
7. N.H. al-'Abudi, *Masjid al-Bidiyya (Dirasat arkeulujijiya terikhiya)*, Al Ain (1992).
8. A Cortesao, A.T. da Mota *Portugaliae Monumenta Cartographica*, Lisbon (1960). I. For a plan of Kalba, V. pl. 581, M. Godinho de Eredia, ca 1620.
- de Resende, *Livro do Estado da India Oriental* (1646), British Museum Sloane MS, 197; fol. 149-150 for the fortifications of Dibba (Doba); fol. 143-144 for the fort of al-Bidiyya (Libidia).
- A. Cortesao, A. T. da Mota, *Portugaliae Monumenta Cartographica*, op. cit. I, Pl. 40 a; II, pl. 22) for Khawr Fakkan (Corfacan).
9. C. G. Constable and Lieutenant A.W. Stiffe, *The Persian Gulf Pilot* (1890). Captain G.B. Brucks, (1822 or 1830). Chart by Brucks and Haines (1828).
10. Between 13th-15th April 1995, the authors conducted an initial examination of the Wadi Safad to estimate the archaeological potential of the valley. It was part of a broader environmental review for the Fujairah Government to assess the Wadi Safad as a protected heritage site.
- As far as the authors are aware, the only archaeological survey prior to the present work that had taken place in the al-Qurayya area was that conducted by B. de Cardi (B. de Cardi, op. cit., p. 256), although the Swiss team led by P. Corboud worked in the area immediately to the north. Subsequent work has been carried out by M. Ziolkowski *et al.*, (University of Sydney) in the al-Qurayya area, in particular Sites FS 1 and FS 2, and by S. Garfi and G. Longden (Trinity College, Carmarthen).
11. Wadi Safad is located at DC 320 891 and DC 338 89. The turn-off to the old metalled road to Safad from al-Qurayya in 1994 was 10.7 kms. north of Fujairah (measured from the Hilton Hotel at Fujairah). Safad was marked on a blue signpost on the outskirts of al-Qurayya. With the building of the new asphalt road skirting al-Qurayya and leading into the Wadi Safad, the location references given are now less useful than they were at the time when there was simply a motorable track.
12. S. Garfi and G. Longden subsequently undertook further survey work after completion of the asphalt road, although this was confined primarily to the *husn* and its environs, (FS 20 - FS 23). Their report is in preparation for publication.
13. Dostal, op. cit., *passim*
14. P.M. Costa, *Musandam. Architecture and material of a little known region of Oman*, London, (1991), p. 95-143.
15. Dostal shows such a roofing system, op. cit. p. 36, plate 8.
16. Site Code: FS = Fujairah: Safad
17. Geoffrey King and Cristina Tonghini, "The Western Islands of Abu Dhabi: Notes on Ghagha", in: *Arabia and Its Neighbours: Studies in Honour of Beatrice de Cardi*, (Phillips, C.S., Potts. D.T. & Searight, S. [eds.]) Brussels (1998).
18. De Cardi, op. cit. p. 236.

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(Editors' Note: Further work in the Wadi Safad, by Gareth Longden and Salvatore Garfi, of Trinity College, Carmarthen, UK, focussing on the *husn* and associated structures, was undertaken in December 1998, and received a small grant from the Conservation Fund of the Emirates Natural History Group. Further work was undertaken in December 1999. A preliminary report on the first season of their work will be published in the next issue of *Tribulus*).