## WINDOWS ON OUR PAST

## ARCHAEOLOGICAL RESEARCH IN OMAN SEASONS 2012-2014

## VOLUME 5

# LANDSCAPE ARCHAEOLOGY Explorations & Material Culture



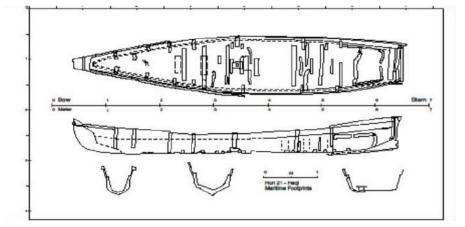
Ministry of Heritage and Culture - Sultanate of Oman 2015

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## The Maritime Cultural Landscape of Masirah Island, Oman





2013 Report

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#### INTRODUCTION

#### BA IPM scheme funded - one year project

This paper presents the results of a collaborative project that aims to characterise the maritime cultural landscape of the Island of Masirah (Fig. 1), south-eastern Oman through a variety of approaches. Maritime cultural landscapes are a relatively new concept within landscapes studies particularly in the Arabian Gulf region. This interdisciplinary paper explores the potential of this approach within the context of a recent preliminary study of the Island of Masirah, south-eastern Oman. Masirah Island is known for its extended occupation and rich archaeological record and in particular its intensive use of marine resources from the Neolithic period until the modern day. Masirah was known as an island of fish-eaters, mollusc gatherers and turtle hunters and it had a role in trade on a local and international scale for millennia (Shanfari 1987, Charpentier 2013).

#### The project is a collaboration of a number of partners, including:

- 1. Dr. Lucy Blue from the Department of Archaeology at Southampton University, UK is the principle investigator of the project. She has conducted ethnographic and maritime archaeological survey in the Indian Ocean region and the Arabian Gulf for over fifteen years.
- 2. Dr. Nasser Al-Jahwari, Head of Archaeology Department as SQU is the co-investigator of the project who brings a wealth of knowledge and terrestrial experience of Omani archaeology.
- 3. The Ministry of Foreign Affairs (MFA), Sultanate of Oman. This ministry sponsored the Jewel of Muscat project and the on-going boat yard traditional boat building project, currently directed by Dr Eric Staples and overseen by Dr Tom Vosmer. The MFA also sponsors the proposed primary researcher for this project Luca Belfioretti, site director of the Jewel of Muscat project. Since the mid-1990's the MFA has supported this team to undertake studies and reconstructions of traditional boats (Magan boat, Jewel of Muscat) and continue to record and construct vessels in their base in Qantab, Muscat.
- 4. Three staff members from the Ministry of Heritage and Culture (MHC) participated in this project: Ayoob Naghmoush Al-Busaidi, Sultan Al-Muqbali and Ali Al-Dhuhli.
- 5. The project also had three students from SQU.

The collaboration presents a perfect partnership to promote a project of this nature, and provides an opportunity to train and hopefully enthuse, SQU students in the study of maritime archaeology, an area of expertise that is currently lacking from the SQU portfolio.

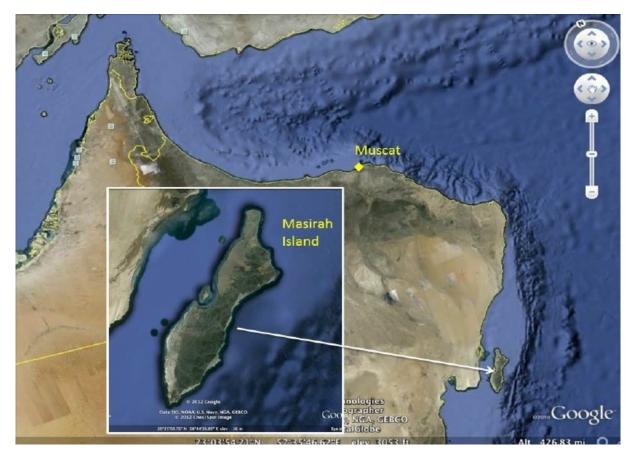


Figure (1) Location of Masirah Island in South-eastern Oman.

#### Research aims and objectives

The research objective of the project is to characterise the maritime cultural landscape of the island. Limited archaeological survey has been conducted on the island (Al-Shanfari 1987; Yule et al. 1994; Charpentier 2013) (Fig.2) and to date the primary focus has been an assessment of the prehistoric landscape. However, a reconnaissance undertaken by Blue in January 2012 revealed an unsurprisingly, extensive maritime landscape along the coastal littoral and in the intertidal zone.

As a result, the Maritime Footprints project set out to explore the dynamic maritime cultural landscape of Masirah through a variety of methodologies. It employs a range of terrestrial and maritime archaeological survey techniques and approaches, mapping selected sites, their geographical context and associated coastal features; it undertakes maritime ethnographic inquiry, studying the traditional boats, their use and change over time; it explores socio-linguistics and records oral traditions, memory and practise relating to the sea and maritime activities.

An evaluation of the recent maritime traditions is an important aspect of this research. The introduction of motorised engines and fibre-boats, large scale fishing and rapid coastal development has witnessed huge changes in traditional fishing practise and maritime activities.

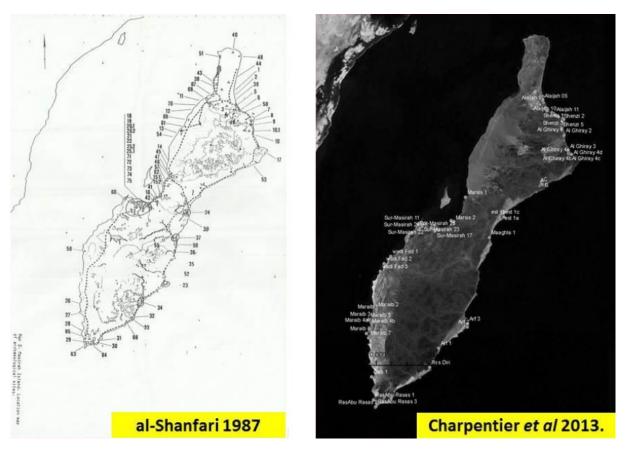


Figure (2) Previous Archaeological works in Masirah Island.

Much of these traditional practices are now dying out and it is essential that a record of these materials and practises is made before they vanish entirely. Thus, an ethnographic approach is integral to this research and essential to record the last days of maritime traditions in Oman.

The project also undertook archaeological recording, including coastal and inter-tidal survey and recording of coastal features such as fish traps, as well as noting coastal archaeological sites particularly of the Islamic/late historic period that have received limited attention to date. Three case studies are identified to explore the changing maritime cultural landscape of the island from prehistory to the modern day in order to reveal a more nuanced appreciation of maritime activity, seafaring, and changing use of the marine resource over time and between the islands two geographically diverse coastlines. Essentially this project aims to identify the maritime character of Masriah Island noting continuity and change over time and space.

#### ETHNOGRAPHIC SURVEY

A comprehensive record of the complete range of traditional vessels was undertaken. Traditional vessels were noted on both coasts of the island, largely hauled up on the beach, apparently abandoned.

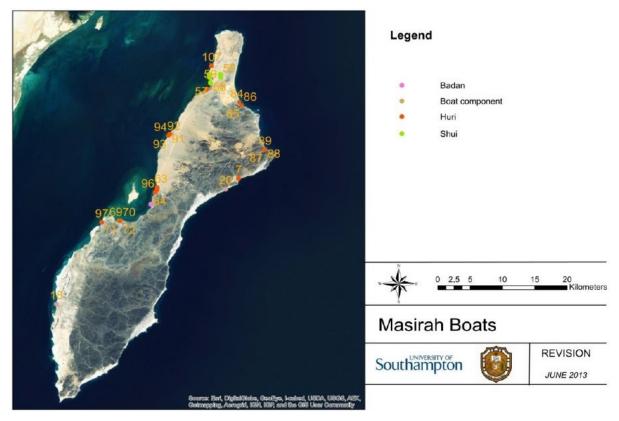


Figure (3) Location of all remaining wooden / traditional boats in Masirah Island.

#### **Boat Recording**

A variety of vessels were recorded during the survey to different degrees of detail. A brief survey was conducted of all wooden vessels found beached on the coastline, numbering 17 larger boats and 23 huris (log boats) in total (Fig. 3). The survey consisted of measuring the basic dimensions (LOA and maximum beam), marking their location, photographing them, and assessing their condition (Fig.4). There were three main types recorded: the *sambuq*, the cargo *badan*, and the *huri*. This survey did not include the larger working *shu'i*, a modern wooden fishing vessel, as they were all afloat and actively engaged in fishing at the time.

#### The Sambuq (Figure 5)

Arabic terminology for craft has a multiplicity of meanings, with significant regional and even generational differences often applied to what appears to be the same vessel type. The term *sambuq* is used in reference to the local Masirah small *Shui*.

The vessel type documented in Masirah is a motorized wooden fishing craft, 10-14.35 m long and 3-4 m in beam. Fifteen were measured and photographed, with the highest concentration on the beaches just south of Masirah town. Its features include the straight raked stem, distinctive stemhead profile and transom wings similar to the larger *shu'i* still in use in the harbour.

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Figure (4) Boats & Ethnographic boat recording.



Figure (5) The Sambuq.



Figure (6) The Badan.

Due to their state of deterioration, it is evident that the majority of them are no longer being used as fishing vessels. They represent a transitional phase in the processes of modernization on the island. These wooden motor craft were created after the mass introduction of marine engines to Oman in the 1970s and 1980s, but their abandonment indicates that they have been superseded by the recent mass introduction of lighter fiberglass fishing craft, which require less maintenance and crew and can be more easily beached.

#### The Cargo Badan (Figure 6)

The cargo *badan* is an older generation of sailing vessel than the motorized Masirah *sambuq*. The *badan* is primarily an Omani boat type. It is a double-ended vessel characterized by a blunt 'cutter' bow, and a sharp stern fin (*fashin*). The oral interviews indicated that the cargo *badan* was the most prevalent mid-sized vessel in mid-twentieth century Masirah, and was used for both fishing and regional trade with other parts of the Arabian Peninsula and East Africa.

#### Al-Khammam

The only remaining cargo *badan* still found on the island is the *al-Khammam*. It is a locally wellknown vessel, mentioned by all of the interviewees. It was previously recorded and published by Norbert Weisman, (IJNA 1998). Since construction plans already exist, extensive documentation was not undertaken for the survey. However, select remnants of rigging were measured and photographed, an oral history of the vessel was gathered from her former captain, and her overall condition was assessed.

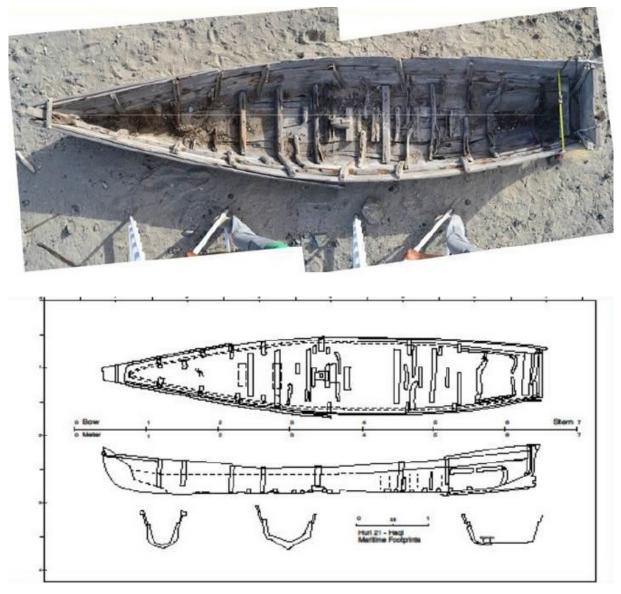


Figure (7) The Huri.

#### The Huri (Figure 7)

The *huri* was the most prominent vessel in the maritime landscape of Masirah. They were traditionally log boats although many were extended, expanded and drastically altered over the course of their working lives; largely adapted before they reached the island. The *huri* was the preferred small vessel used for fishing, with two main different types explained in interviews. The *huri majadif* was a larger *huri*, propelled by oars (*majadif*), and the *huri jaduf* was a smaller version, propelled by a paddle (*jaduf*). They were up to 8m in length.

For the purposes of this survey, 23 *huri* were documented in more depth. Dimensions, fastenings, framing and planking typology, materials, repairs, location and condition were all recorded, and each *huri* was photographed. In addition, one *huri* was recorded for the purposes of a construction plan.

#### The Interviews:

Interviews with the local fishing community were conducted to learn about fishing practise, operations and techniques both past and present.

This enquiry explored the diversity of marine resource extraction (shell collecting, fishing, turtle catching), enquired about the materials, tools and technologies employed, and took note of seasonal and regional changes in traditional fishing practice and navigation. This also allowed discussion with the local seafarers of other maritime related activities on the island, harbours, goods of trade etc. as well as the remains that may have been brought up from the seabed. Informants were also asked about changes over time. Interviews were recorded for archival purposes, and future research.

Six (nine) interviews in total were conducted in Arabic and a variety of topics were covered. Masirah still has several sea captains and sailors of the older generation that remember sailing along the trade routes. Four were interviewed: All four of these interviewees had participated in the Southern Arabia-East Africa "dhow trade" still prominent in the mid-twentieth century, and were well versed in local fishing trade as well.

In addition, two younger fishermen were interviewed for information related to more recent fishing practices and local maritime culture:

It is clear from all interviews that fishing was and still is the single most important industry on Masirah Island. All interviewees had engaged in fishing at some point in their lives, and noted some basic features to the industry in Masirah. There are two distinct zones of fishing on the island, the east coast (*al-Dhahiriyah*), an area more exposed to the monsoons, and the west coast (*al-Khawriyah*), which is more protected. Most preferred fishing on the west coast of the island due to fact that there are more fish. Fishing is undertaken year round, but the best season for fishing is between October to December, when a considerable variety of fish, such as tuna, kingfish and shark is available. They used cast nets and fixed pen-type gill nets. They were also familiar with the intertidal stone fish traps.

As for boatbuilding, the informants indicated that even in the past the majority of vessels were built elsewhere, either in Sur or India. There were three main types are those described above.

The four older interviewees also all testified to Masirah's participation in the larger regional trade to other Arabian ports and East Africa in the mid-twentieth century. All four interviewees had sailed to Yemen and East Africa, and three had been captains of vessels travelling this route. The primary export from Masirah was its fish, in particular dried shark.

Basic navigational practices were also mentioned during these interviews. All interviewees referred to the difficulties of life prior to the recent thirty-five years of modernization, challenges that fostered a strong sense of shared community. All four of the older generation noted the changes that had taken place, as fish has become less bountiful and less assistance has been provided by local community members.

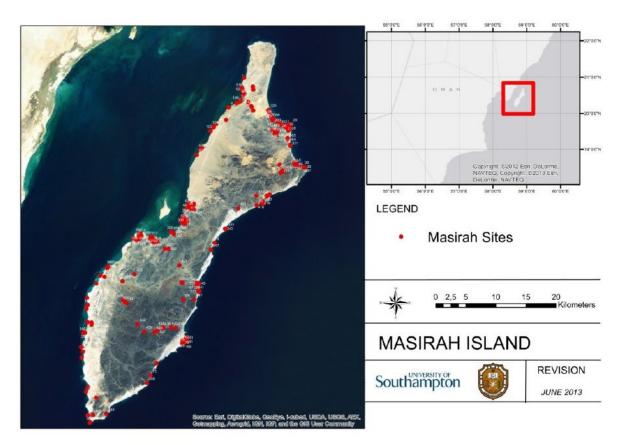


Figure (8) All archaeological sites recorded during the survey.

#### COASTAL SURVEY

Was conducted along both coasts by foot and by car. A comprehensive survey on foot was conducted of the west coast from Masirah Town to Sur Masirah; around the rest of the island targeted sites were visited based on previous observations and SH survey. New sites were noted on handheld GPS, photographed and surface finds were collected when necessary.

In total over 320 new sites (Fig. 8) were noted from small areas of cultural activity including extensive evidence for shell collecting, fish traps, boats, graves and archaeological sites from prehistory through to the modern era.

#### **Coastal Installations**

#### Fish traps c. 20

A large number of coastal features involved in the trapping and catching of fish were noted, specifically beach rock fish traps (c. 20). Stone fish traps (Fig.9) essentially consist of medium sized, roughly hewn, unworked fragments of limestone and beachrock (known locally as 'farush'). These features were erected on the seabed in the inter-tidal zone, and acted as 'artificial barriers that trap fish through the rise and fall of the tide' (Fig. 10). (Breeze et al 2011).

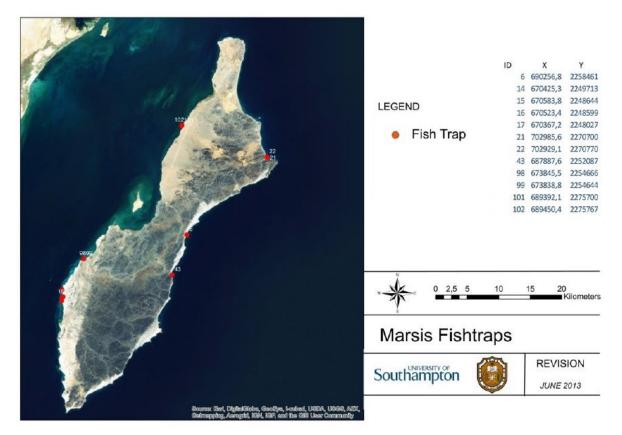


Figure (9) All fish traps recorded during the survey.

They were noted on both coasts and some 20 were noted, some of the most southerly found in the region to date. Few if any, were still operational, most were associated with fishing villages and others were connected with more isolated fishing camps.

#### Raasiya-20 31.259/58 57.407

On the east coast modern fishing village of Raasiya, three fish traps (Fig. 11) and three huris were recorded and a short coastal survey along the promontory to the south east noted two sites with flint scatters and circular shell processing areas and small units enclosed with stones.

#### Fishing practise (tangible) (Figs.12-13)

Other aspects of fishing, fish nets, fish trapping and shell collecting and fish trapping especially at low tide, was also noted all around the shores of the island particularly along the west coast.

Shell Processing was identified all around the island both along the shores and often some distance inland (Figs.14-15). The areas are well recognisable, being a concentration of marine shell probably exploited to consume the mollusc as food resource. Usually they are circular in shape and the concentration indicates that the shell where processed in situ. The concentrations vary a lot in dimension, shells can be concentrated in less than a meter or they can cover a wider area. Common shells present are clams but some oyster and gastropods are



Figure (10) one of the fish traps recorded in Raasiya, east coast.

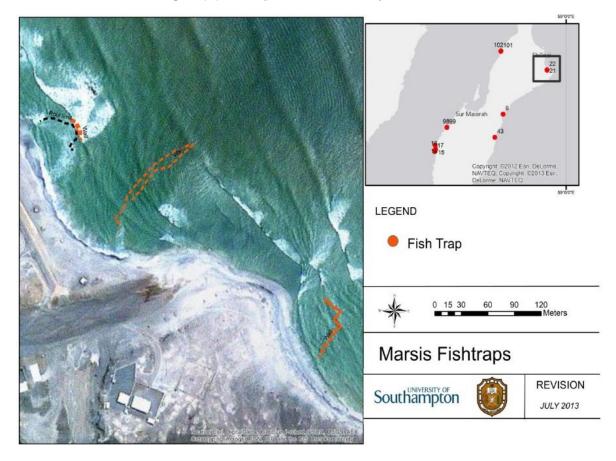


Figure (11) fish traps recorded in Raasiya, east coast.



Figure (12) gears for fishing practices in the Island.

#### Figure (13) fishing practices in the Island.





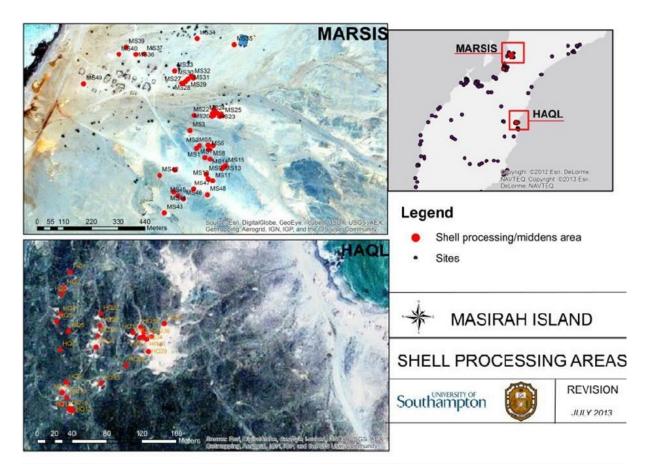


Figure (14) Shell processing/midden areas in the Island.

present. The types of shell present are directly related to the kind of shore (rocky or sandy) they were collected from. Shells were brought back to settlements on a regular basis and discarded shells accumulated around living areas. Some areas such as **A1 Aijah-20 34.827/58 56.022** on the northeast coast were renowned beach landing. Here an informal interview was conducted with a man called Hamid who collected shells on the rocky reefs around the island with his wife and children – Hamid also collected shells on a small islet to the north of the island that he accessed by paddling a rubber ring (inner tube of a car) to reach. He also had a boat on the beach landing beach to the south and confirmed that he and others would collect fish from the larger dhows that moored off shore.

A number of other fishing sites were investigated as part of the survey and a number of archaeological sites investigated. One of the largest was on the east coast known as **Ras Gidi (SH 23) - 20 16.874/58 46.882**, noted in 1983 by Shanfari who recorded an oval structure built of heavy black blocks, some smaller shell accumulations and stone structures with Lizq-type pottery sherds dating to c. 1300-300 BC. Our survey noted three distinct areas of activity and recorded 18 new sites in all three parts including stone structures, a series of graves in separate burial areas, small shell processing areas, numerous circular stone many associated with shells. Ceramics and small finds were collected form RG3, including Late Islamic Bahla and Julfar wares, worked shells and stones, perforated stone, worked shell beads and a pounding stone.



Figure (15) one of the Shell processing/midden areas.

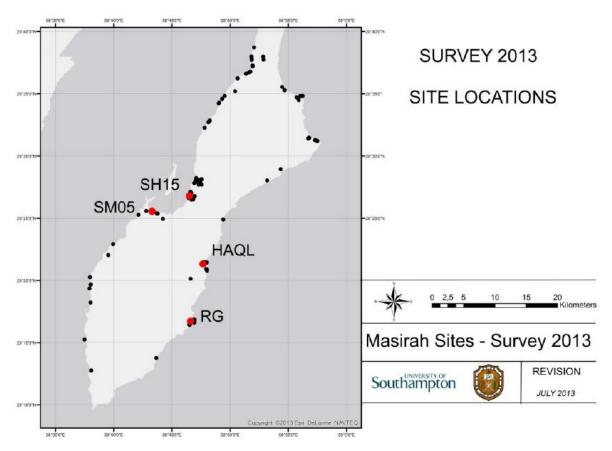


Figure (16) archaeological case studies.

#### ARCHAEOLOGICAL CASE STUDIES

Selected to cover a broad chronological range and observe the changing use of the maritime landscape in different locations and across time where possible (Fig. 16).

#### Sur Masirah 05 (SM 05)- 20 25.392/58 43.745:

Located on the west coast to the south west of Sur Masirah, on the far south-western shores of Sur Masirah Bay. The area was surveyed by Charpentier's team in 2012 (Charpentier 2013) and thus was only looked at briefly with the objective of undertaking a RTK topographical survey (Fig. 17) and to contextualise the site in its wider maritime landscape.

The area surrounding the tell is very low lying, with a small lagoon to the south and sabkha to the east. The Sur Masirah lagoon is to the north. The marine environment therefore offers a variety of resources to undertake fishing. A small rocky promontory extends from the site to the west. It is possible that the site could have been surrounded by water in the past.

The French survey determined that occupation in this area dates back to Neolithic times and with possible continuous occupation up to the Islamic times. They identified a number of archaeological finds, including shell bead production, flint and ceramics possibly from the Iron Age and most certainly from the Islamic era. Our survey only noted a small amount of ceramic including Julfar and Bahla wares, Chinese blue and white, Scrafiatto ware, a net weight sinker, worked shell and flint.

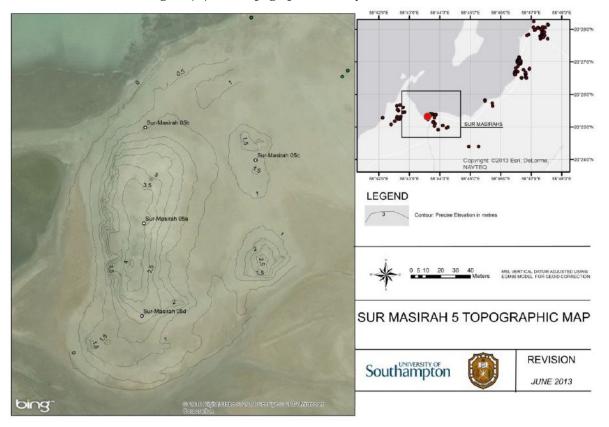


Figure (17) RTK topographical survey in Sur Masirah.

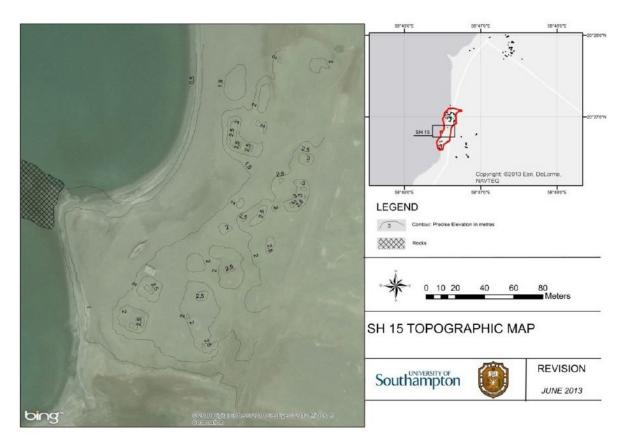


Figure (18) RTK topographical survey in Sur Masirah Site SH15.

Further contemporary fishing practise and boat use was noted along the shore. Two huri were registered together with a *shui*. A few other boat parts were lying discarded on the beach (bc 1). One woman was observed pulling in a net, and a few abandoned fish huts were noted on the shore.

## SH 15/1 & SH 15/2, SH 15/3- SH 15/22 - Islamic Town & Cemetery- 20 26.509/58 46.678

Located on the west coast to the south of Marsis and north of Sur Marsirah, the site referred to as SH 15 was first recorded by Shanfari in 1983 (Al-Shanfari 1987). The site was divided into two main areas by Shanfari SH 15/1 (the cemetery) and SH 15/2 (the late Islamic settlement).

SH 15/2, SH described the settlement as a vast field of house ruins close to the shore with a central street on both sides but mainly between the street and the coast. He noted 15 - 20 ruins ... All the houses had been built in stone. The ruins are still up to 1 m high... One of the houses is larger than the others, looks more prominent and could have been somehow fortified. The place seems to have once been an important settlement for the island where a protruding narrow rock barrier produced good protection for the boats" (Al-Shanfari 1987).

We recorded SH15/2 using the RTK to produce a topographic plan of the area (Fig. 18) and to determine the full extent of the area. In total some 68 structural features (SH 15/2 S1-SH 15/2 S68) were identified (Fig. 19). The vast majority of these features look like low mounds

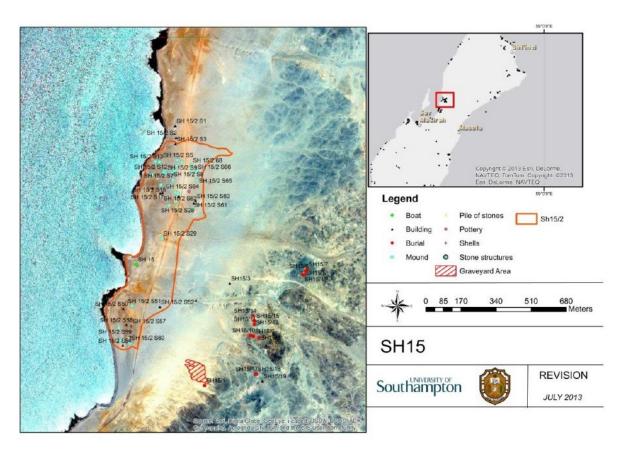


Figure (19) archaeological sites and structures recorded in Sur Masirah Site SH15.

with one possible circular stone wall (Fig. 20). The diameter of these mounds varies between 2m and 10m, and their height is around 20cm to 1m. They are built of local gravel stones, beach rocks and sometimes coral. Many of the building units contain piles of shells, together with a small number of Late Islamic pottery sherds. Some of them are of irregular shape with possible compact earth and stone floors.

A large number of Late Islamic pottery sherds were collected, including the well-known, common types such as local Bahla ware, Julfar ware, Nabhani ware, Combed ware, Chinese Blue and White, modern porcelain, European porcelain, glazed blue and green, and possible celadon. In addition, Site Sh15/2 S4 yielded an almost complete jar of possible Julfar ware which contained high rate of burning.

On the beach the old Badan trading vessel still remains discussed above .

#### Cemetery (Figs. 21 & 22)

Shanfari (1987: pp) describes site SH 15/1 as "an enclosed Islamic cemetery containing 15 graves and nicely worked tombstones of sandstone or beach rock, many of them fallen down and broken. Many bear inscriptions cut in relief or painted in red colour. The gravestones of this 250-year-old cemetery are unique documents of the island and should be restored. The site is held to be sacred and the local inhabitants have buried their dead in it for centuries".



Figure (20) one of archaeological structures recorded in Sur Masirah Site SH15.

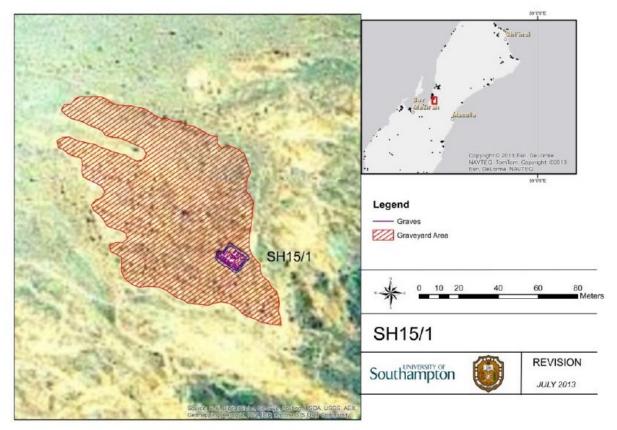


Figure (21) The Islamic Cemetery SH15/1.



Figure (22) The Islamic Cemetery SH15/1.

The cemetery at SH15/1 consists of a central area bounded by a low stone wall. Inside in contrast to the observations made by Shanfari, we noted 12 tombs and 10 burials/graves. Each was mapped using the RTK, photographed extensively and a photo mosaic is in production. The tomb stones were also photographed, recorded and the inscriptions translated. Outside of the inner cemetery a large number of additional burials were noted extending beyond and around the central tomb area.

A wider survey was conducted in the immediate area of the cemetery and to the north of it. A number of new sites were noted including 14 possible Hafit cairns (Late 4th - Early 3rd millennium BC) (Sites SH15/4 to SH15/18) (Figs. 19 & 23). These circular cairns are built of limestone and local gravel stones, and one ring wall is visible in all of them. Their diameter varies between 3-8m, and they are preserved to a height that varies between 20 cm and 80 cm.

However, the small number of cairns and the absence of datable materials, make us uncertain whether or not they are tombs of the type known as Hafit cairns.

The survey also yielded three stone circular features (Site SH15/3): one considerably larger than the other two; 11 m in diameter, that appeared to form a single unit divided into three sub-units (Fig. 24). There are two possible entrances. Inside the circles the area was swept

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Figure (23) one of the possible Hafit Cairns in SH15.



Figure (24) one of the three stone circular features at Site SH15/3.

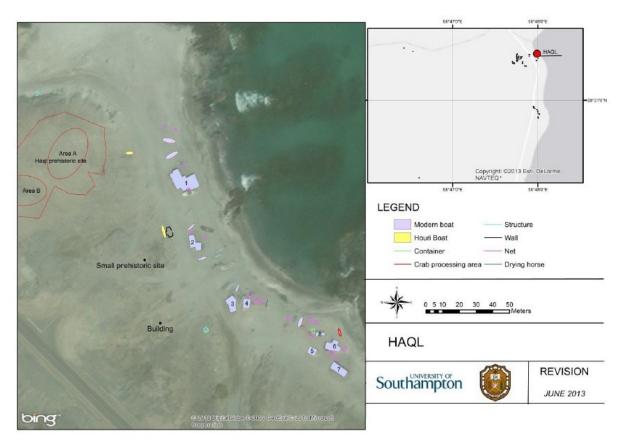


Figure (25) archaeological features recorded at Haql.

clean and a big stone was placed in the middle of each circle along with a shell with burning inside. In the centre of the three circles was a platform or tomb. Limited finds were recovered largely dating to the late Islamic era (e.g. Bahla ware and Chinese Blue and White).

#### Haql (SH 37)- 20 21.503/58 47.893

Haql was selected as the modern analogue. It is located on the east coast on a small sandy bay bounded by rocky promontories with a reef to the south. It lies at the head of a large wadi system and is backed by a silting lagoon to the north. Seasonally the lagoon dries out and salt is extracted for fish salting. To the south, the rocky reef extends parallel to the sandy beach. In land modern farm units were observed. To the north up the relatively large wadi, the main village of Haql (meaning field) is located. The fresh water from springs and the wadi provides one of the more lush environments on the island with palm trees and fields. Formerly Haql was reknowned for shark fishing.

This site was surveyed by Ali Al-Shanfari in 1983 (Al-Shanfari 1987) who recorded limited archaeological finds.

The beach front at Haql was selected as the modern case study due to the wide range of fishing activity that appears to have been undertaken here (Fig. 25). Along the shore were seven fishing huts (Fig.26) all of which were recorded with the RTK and each was thoroughly documented with photography inside and out where possible. Further evidence of fishing



Figure (26) one of huts recorded at Haql.

practise was recorded with the RTK including the location of fibre boats, two huri (Fig. 27), piles of nets (Fig. 28), fish processing areas, two small stone built huts (Fig. 29) apparently used for storing salted fish and an outline mosque immediately next to Huri 7. The two huris were registered (Huri 7 & 21). Huri 21 was planned in detail and a photo mosaic plan of the hull produced.

Along the reef offshore to the south off the long sandy beach, a series of three fish traps were noted (Fig. 30). Informal interviews were conducted with three local fishermen (two of whom owned each of the huris registered).

More extensive survey was conducted to the west and south of the beach area. Inland to the west, 29 open shell processing areas (HQ1-HQ7, HQ9-HQ15, HQ23-HQ37) were noted (Fig. 31). Further shell processing areas were noted at the back of the long sandy beach to the south enclosed within circular stone structures (HQ76-HQ92).

Along the edge of the low ridge to the west of the beach inland, small rock shelters (HQ16-HQ22) were discovered previously blocked by rocks – enclosed within the shelters were fishing gear (floats, etc.) (Fig. 32), one contained a small human skull (HQ21) (Fig. 33); another the lid of a bin, and wooden pieces of a boat (e.g. HQ22), etc.

Higher up the hills were the remains of possible stone structures of irregular shape (e.g. HQ8). Along the ridge to the southwest were further circular units some bounding shell processing areas. Other stone circular structures (HQ69-HQ75) of up to 2m in diameter were also found located on the top and edges of a rocky hill overlooking the sea.



Figure (27) one of huris recorded at Haql.



Figure (28) pile of nets recorded at Haql.



Figure (29) one of the two small stone built huts used for storing salted fish at Haql.



Figure (30) one of the fish traps recorded at Haql.



Figure (31) one of the shell processing areas recorded inland at Haql.

A small prehistoric site was identified on the low buff above the beach area that was also mapped with the RTK. Surface finds were collected from the prehistoric site.

The environment offers a range of marine resources; lagoon with associated salt extraction used in the salting of fish, sandy bay, rock fringing reef, fish traps and offshore fishing, shell fish, crabs.... And due to the presence of the prehistoric site it was possible that fishing and coastal resources were harvested in this area for some time.



Figure (32) one of the rock shelters with fishing gear recorded inland at Haql.



Figure (33) a small human skull found in one of the rock shelters (HQ21) at Haql.

#### **Conclusions and Future Work:**

- The results show that the Island's inhabitants are, since prehistoric times, very dependent upon the sea and its resources.
- In total some 325 archaeological sites/features were recorded, ranging in date from the Stone Age up to the present day, and represent a variety of types of sites.
- Although the results show a marked difference between east and west coasts of the Island (both observed and stated) but we still need to check whether or not this was the case in the past, which needs more input from fisheries people.
- It is also important to explore the changing maritime physical and cultural landscape of the Island.
- It is also important to engage with full breadth of chronological sequence to understand change over time and space from prehistory through to modern day this could only happen through collaboration with other colleagues (French) and through much more in depth survey and excavation.
- This would hope to include an underwater archaeological investigation of targeted coastal areas around the island thus extending the research profile and expanding the skill base of the team.
- Such a project would provide the scope to explore the changes and continuity of maritime activities and fishing practices over an

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