

Abu Dhabi Islands Archaeological Survey Project

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1995-1996 Season

Occasional Newsletter

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Evidence of wells, industry found on Balghelam

The first phase of the Project's winter season ended a few days ago, after five weeks of survey and excavation on the island of Balghelam, 25 kilometres north east of Abu Dhabi. The results, yet again, were remarkable, yielding evidence of the use of the island in the past both as a major local source of fresh water and as a possible site where lime could have been made for plaster by burning seashells.

The island had previously been surveyed by Jakub Czastka and the Project Co-ordinator at the invitation of its owner, Presidential Court Chamberlain HE Sheikh Surour bin Mohammed al Nahyan, with extensive evidence being found of raised circular mounds and small rectangular structures along a raised shoreline close to the southern coast of the island. Similar structures had previously been identified on a number of other islands, including Merawah, Liffiyah and Yasat Sufla (South Yasat).

During the preliminary surveys, we were also shown the site of an old well, close to the raised shoreline, and with mounds nearby that we were informed might be the remains of houses.

The season, which commenced just before the beginning of Ramadan and ended after the Eid, was directed by Salvatore Garfi, with the assistance of Jakub Czastka and Alexander Wasse.

Work started in the area of the well, and we were surprised to find that the nearby mounds were actually the spoil heaps from a series of earlier wells, each dug down for a couple of metres or more into the bedrock. Evidently in the past, they had been filled in frequently by blown sand, and in the process of being cleared out repeatedly, the surface bedrock around each well had been undermined and had collapsed, apart from the one remaining well visible on the surface, presumably the last one to be dug.

A total of seven wells were uncovered, the largest

of which, over five metres in diameter, had clearly been in use over a long period, collapsing and being cleared out several times. In deposits covering two of the wells, potsherds from the 16th or 17th Century AD were found, indicating that the oldest of the wells are almost certainly more than five hundred years old.

The number of wells is evidence of what must have been a fairly substantial supply of water, supplementing the picture now being built up by the Project of the presence of fresh water on many of Abu Dhabi's offshore islands in the past. That, in turn, is helping to fill in the preliminary outline of what must have been a fairly extensive degree of settlement spread out amongst the islands - something completely at variance with the impression once held that only a few simple fishermen and pearl divers could ever have lived on the islands.

Work was also undertaken on a number of the rectangular hearths and on a couple of the raised circular mounds. The latter yielded large stone structures, one sub-rectangular and one circular, built of large slabs of stone set on end and sunk down onto the underlying bedrock. In these structures was extensive evidence of burning. The current hypothesis, which we hope to test through geo-chemical analysis, is that, since the structures are too large to have been domestic hearths, and because there are a large number concentrated in a fairly small area, they may have been used for burning seashells to make lime.

In the midst of the area containing the pits and hearths, a small alignment of three stone walls was found, the purpose of which remains unclear. In association with the walls, however, a small quantity of pottery was found which should permit this part of the site to be dated. At a first glance (and subject to later examination by our pottery specialists), it

This tentative dating roughly coincides with the period during which we currently believe the raised shoreline on which the site sits to have been active, when sea level was 80 cm to 1.20 metres higher than it is at present.

Elsewhere on the island, a number of other sites were identified for the first time, including several areas of pottery scatter dating back to the Sixteenth Century AD.

Overall, around 100 individual features of archaeological interest have now been identified on Balghelam, which indicate use over a probable period of up to two thousand years.

During the Project's work, we were delighted to receive direct support from ADCO, who lent a surveyor and equipment for computerised mapping, and from Ewbank Preece, who also loaned us some survey equipment. This will permit us to complete the most detailed mapping ever undertaken of the island, copies of which will be supplied to HE Sheikh Surour.

We were also grateful for the assistance provided by a number of volunteers who came out for a few days at a time to help.

A report on the fieldwork is now being prepared for HE Sheikh Surour, to whom we are most grateful for his direct and continual support and assistance.

Sufficient has been found during the relatively short season to confirm the existence of extensive and previously unstudied settlement on Balghelam, with probable affinities to other similar sites on many other islands.

The report will also include additional data collected during the excavation season by members of the Emirates Bird Records Committee on the flora and animal life, including birds, to be found on the island. Scientific study of Balghelam is now probably more extensive than of any other island in Abu Dhabi.

Following the discoveries of this season, we shall now be seeking approval for a further short season next winter, to continue this important study of the way of life of Abu Dhabi's island inhabitants in the pre-Islamic and Islamic eras.

Geo-chemical analysis - help needed

During the work on Balghelam, our team collected a number of samples from stratigraphic deposits which now need analysing.

By so doing, we hope to test the hypothesis that the large fire emplacements or hearths were used for lime production. Since there is no evidence, so far at least, of plastered buildings on the island, the lime must have been 'exported,' although whether to the nearby coast or islands or further afield remains

to be clarified.

Transects of samples have been taken from across a number of the features excavated, and we hope through analysis to find out the relative calcium carbonate content rises in and around them.

Assistance in this matter is vital to our understanding of the use of the fire emplacements, and, overall, the way in which man in the past lived on Abu Dhabi's islands and exploited the sea and its island resources.

Sufficient information has already been collected, however, to suggest that there was early 'industrial' activity on Balghelam, of a kind not previously detected, or at least recorded, on Abu Dhabi's offshore islands.

While we could arrange to have the samples sent to London for testing, we would prefer, if possible, to have the work done here, both the sake of simplicity, and because of our belief that it is preferable, where possible, to make use of the scientific facilities available in Abu Dhabi.

If any sponsors have the appropriate facilities for analysis, or know of local companies who do, please let us know.

Sir Bani Yas season begins next week

Project Director Dr. Geoffrey King and six other members of our Project team of archaeologists arrive here on March 2nd to join Sal Garfi and Jakub Czastka for the beginning of our main season on Sir Bani Yas, which will run until late April..

The season will tackle two sites on the island.

One is the site of the pre-Islamic church and monastery in the Al Khor district, where Field Director Joe Elders will be seeking to complete the uncovering of the collapsed eastern face of the church, from which area a significant amount of decorated plaster was recovered during last year's excavations. He will also hope to commence investigation of the outlines of a building to the south which was detected during last spring's magnetometer survey.

An academic report by Dr. Geoffrey King on the first seasons of work on the Al Khor site is, incidentally, to be published later this year in the annual *Bulletin* of London University's School of Oriental and African Studies.

A kilometre or so to the north of the Al Khor site, Sal Garfi and Jakub Czastka will commence work on another one of the large mounds identified during the first survey season in the llama enclosure. Work on a similar, but smaller, mound last year revealed the remains of a plastered house with a staircase, kitchen area and a number of rooms, again from the period immediately before the coming of

Islam.

They will also be hoping to discover something about the lifestyle of the occupants of the house, who may have been connected with the monastic complex.

The third part of the work will be a detailed study by Elizabeth Shepherd and Mark Beech on soil samples, environmental material and artefacts collected during the two seasons of work on the 7,000 year old settlement site on Dalma in 1993 and 1994, the oldest settlement site so far discovered in the Emirates.

Our ceramics experts, Beatrice de Cardi and Dr. Cristina Tonghini, will be undertaking detailed study of pottery so far amassed from the Project's various excavations and surveys, including material from Sir Bani Yas as well as from the Abu Dhabi Airport and Balghelam sites. This will facilitate dating of the sites, and will also provide us with useful information about the commercial links of the inhabitants. up and down the Gulf.

Our island survey team, led by Dr. King, will spend a two week period in early April undertaking further detailed mapping of the islands of Yasat Sufla (South Yasat) and Al F'zaiyyah, with the assistance of a dhow provided through the good offices of our Patron, HH Sheikh Mohammed bin Zayed al Nahyan.

Finally, after the end of the main season, Mark and Maria Beech will be working in collaboration with the Desert and Marine Environment Research Centre of the Emirates University and with the aid of a grant from The British Council, on the creation of a reference collection of the skeletons of fish to be found in the Gulf. This will subsequently be of enormous value in terms of permitting identifications to be of fish bones found on archaeological sites throughout the Emirates.

Backing from ADNOC-FOD

We are delighted to be able to announce that the Abu Dhabi National Oil Company for Distribution, ADNOC-FOD, has agreed to provide sponsorship for the Project for the next few seasons, following a meeting between the company's General Manager, Abdullah Saeed al Badi, and the Project Co-ordinator last month.

The support will help us considerably in being able to plan ahead, not just for the main Sir Bani Yas excavations, but also for the other ancillary surveys and excavations at other times of the year, which, as sponsors will know, have also yielded important results.

The ADNOC Group of companies as a whole has given the Project substantial and consistent support

since it began, and we are delighted to welcome ADNOC-FOD on board.

Thanks to KODAK

One of the most important aspects of any archaeological excavation is the recording of sites and finds on film, both to provide a permanent record and also to permit publication of the results in an easily understandable form.

ADIAS is, therefore, delighted to acknowledge the support received from Emirates Photo Marketing (KODAK distributor for the UAE), who have provided us with all of the KODAK film we need.

With their film, we *know* we will get the good quality we require.

... to Emirates Insurance

Thanks are due, too, to Emirates Insurance Company, for renewing their provision of free personal accident insurance cover for all our team members for the current season..

Archaeologists, like others, like to go about their work believing that their employers have insured them against accident, and we like to offer that assurance as an essential part of running a professional operation.

Thanks to EIC we can do so again, and we are most grateful.

... to British Airways

As, indeed, we are to British Airways, the Project's carriers for the second successive season, who have kindly agreed to provide the bulk of our tickets at a substantial discount, and have thrown a few in for free. They are also helping with an excess baggage allowance for team members so that items of equipment can be flown down free of charge

... to Dhabi Contracting

who have contributed, once again, to our work through assistance provided in the obtaining of scientific equipment for surveying,

... and finally, the Hilton

whose General Manager, Klaus Schack, has decided this year to make a donation to the Project to underline the hotel's continuing commitment to the preservation of the environment and heritage of Abu Dhabi.