## **Archaeological Review**

## The UAE's winter season

The usual flurry of activity took place throughout the UAE over the winter, with teams working from October 1998 until early May 1999. A partial review follows.

In Abu Dhabi, the Department of Antiquities and Tourism in the Eastern Region undertook work in four different areas. In Al Ain, work took place just outside the Hili Archaeological Garden, to determine the extent of sites in the vicinity. At Bida bint Saud, north of Al Ain, where an Iron Age settlement had been found in previous seasons, work was focussed on a search for evidence that a second falai exists in the area.

Under the aegis of the Department, a two-person team from the University of Freiburg carried out a season of survey for archaeological sites in and around the Liwa Oasis, while the Department also continued its maintenance and conservation work at the site of Umm

an-Nar, adjacent to Abu Dhabi Island.

Elsewhere in Abu Dhabi, teams from the Abu Dhabi Islands Archaeological Survey, ADIAS, were active throughout the Western Region. With the assistance of the Abu Chabi Company for Onshore Oil Operations, ADCO, ADIAS identified a number of previously unrecorded sites throughout ADCO's field areas, including sulphur mines at Jebel Dhanna, a group of hearths on the island of Rufayq, and a number of camp sites with associated pottery in the Sahil area.

The sulphur mines, including around 100 shafts and a number of trenches with small galleries, are the first to be recorded in the UAE, although there have also been unverified oral reports of sulphur mining in the past on Sir Bani Yas, which, like Jebel Dhanna, is a diapiric salt dome. Pottery found in association with the mines and on a nearby coastal strip has been provisionally assigned a date between the 17th - 18th Centuries.

ADIAS also carried out a further examination of hearth sites on the islands of Balghelam and Merawah. Also on Merawah, mapping continued of the major MR-1 Late Stone Age site, while an Australian team excavated two large lime kilns, the first of their type to be studied in the UAE. Dating of material from the kilns is now under way. but a preliminary examination of pottery from the site suggests that they may date to the 1st Millennium AD.

C14 dating of date stones from a site on Dalma provided dates of around 5,000 BC, (see P. 17), while the MR-1 Late Stone Age site on Merawah and another lithics site on the western island of Ghagha' have now been confidently assigned to this period following the identification of ceramics from the 'Ubaid period. The pottery is being studied for ADIAS at the Centre National

des Recherches Scientifiques in Paris

In Fujairah, further surveying and mapping was undertaken in the Wadi Safad. Carried out by a two-man team from Trinity College, Carmarthen, the work focussed on the abandoned husn and associated settlement and terraced field system, and will resume later this year. On the coast, a feam from the University Sydney, led by Michelle Ziolkowski, excavations of the small 'Portuguese' fort at Bidiya. Much robbed, and itself having been built partly with stones robbed from an adjacent Third Millennium BC tower from the Umm an-Nar period, the fort is the first fortification from the period of the Portuguese presence along the UAE's northern coastline to have been examined by archaeologists.

Both Fujairah projects received small grants from the

ENHG's Conservation Fund.

In Sharjah Emirate, the usual variety of excavations were undertaken, both by the local team and by visiting teams. These included further excavation of Iron Age burials on Jebel Buhays, as well as a further season of work by the University of Tubingen on the major Late Stone Age mass burial site, and a geomagnetic survey of the Iron Age village at Muwailah, near Sharjah airport. This work, led by a University of Sydney team, provided evidence that the area of the village was significantly more extensive than had previouly been suspected.

On Sharjah's East Coast, a team from the Institute of Archaeology at London University continued work on the tell in the Kalba data plantations, which is now providing evidence of a sequence of occupation from the Umm an-Nar period through until the late Iron Age. Although much obscured as a result of the deposition of outwash from the nearby mountains, the tell is broadly similar in dimensions to the better known site at Tell Abraq on the borders of Sharjah and Umm al Qaiwain, and is one of the country's most important archaeological sites.

The key focus of work in Ras Al Khaimah was at the late Sasanian/early Islamic tell at Kush (see below).

Peter Hellver

## Excavations at Kush, 1998

The fourth season of excavation at the important Sasanian/Islamic site of Kush in Ras al-Khaimah was conducted during November and December 1998. The main trench has now reached a depth of more than 3.5 metres and the deepening stratigraphy is beginning to elucidate the development and origins of the tell.

The site was clearly defended from its foundation, which now looks as if it occurred in the late Parthian or early Sasanian period. Various phases of growth are represented by sequences of walls and ditches. During the 5th or perhaps 6th century AD (precise dating is still uncertain), the site was redefined by the construction of a substantial mud-brick defensive wall standing over 3 metres tall and 2 metres wide. This wall probably defined a large rectangular area on top of the tell. The structure is believed to have been a Sasanian fortress. It was not in use for much more than a century before there it seems to have been destroyed and the site was almost completely abandoned for about two hundred years. It is, of course, tempting to equate this destruction and abandonment with the overthrowing of the Sasanian colonists by the early Islamic Arab tribes under the Julanda kings. This theory still needs to be confirmed by C14 dates.

The site was reoccupied in the 9th century and began to grow and to re-establish itself as the major local urban centre. By the late 13th century the commercial success of the site and the silting up of its adjacent lagoonal harbour caused it to be abandoned in favour of the more favourably located al-Mataf Julfar some two km. away.

This is the story that is emerging so far from the excavations. Considerable insight has been gained into the origins and early history of Islam in historic " 'Uman". Further details will be added when the full analysis of the palaeobotanical and palaeofaunal material and the pot-

tery is completed.

The project is a collaboration between the Ras al-Khaimah Department of Antiquities and Museums and the University of Durham and is being supported by Shell Markets (Middle East) Ltd, The National Bank of Ras al-Khaimah, the British Museum and the British Academy. Permission for the project has been granted by Supreme Council member and Ruler of Ras al-Khaimah His Highness Sheikh Saqr bin Mohammed Al Qassimi, to whom project members extend their thanks and appreciation.

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