## "JELLYFISH": PREHISTORIC DESERT SHELTERS

## By Alison Betts

For many thousands of years nomads have been building windbreaks and animal corrals in the Jordanian desert. These are mostly irregular circles and lines of rough stone walling but occasionally, for practical or perhaps even aesthetic reasons, these structures become formalised. One such type, first recognised by Helms (1981:47), for want of a more technical term has become known as a "jellyfish", because from the air the walls bear a distinct resemblance to this somewhat amorphous sea-creature. These structures have circular outer walls some 40-50 metres in diameter, often with small

hut circles incorporated into them. Most have one or more central hut circles linked to the outer ring by a series of irregular radiating walls like the spokes of a cartwheel. They were first identified from aerial photographs, but recent surveys of prehistoric sites in eastern Jordan under the auspices of the British Institute at Amman for Archaeology and History have succeeded in locating and planning several examples on the ground. (Figs. 2-7)

Survey work has concentrated on the volcanic region north and east of the Azraq basin where basalt boulders weathered out

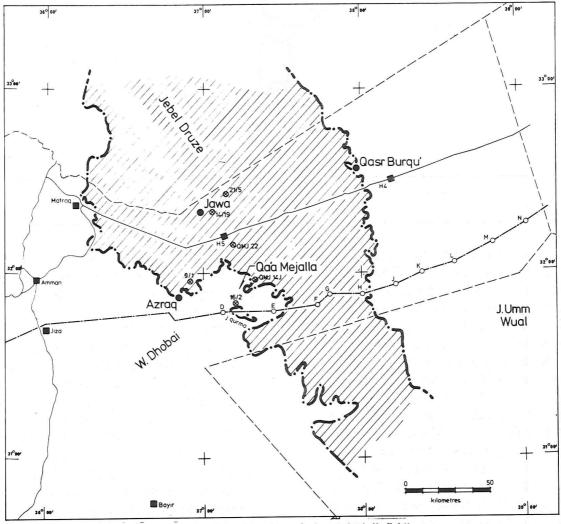


Fig. 1: Map showing location of planned "jellyfish"

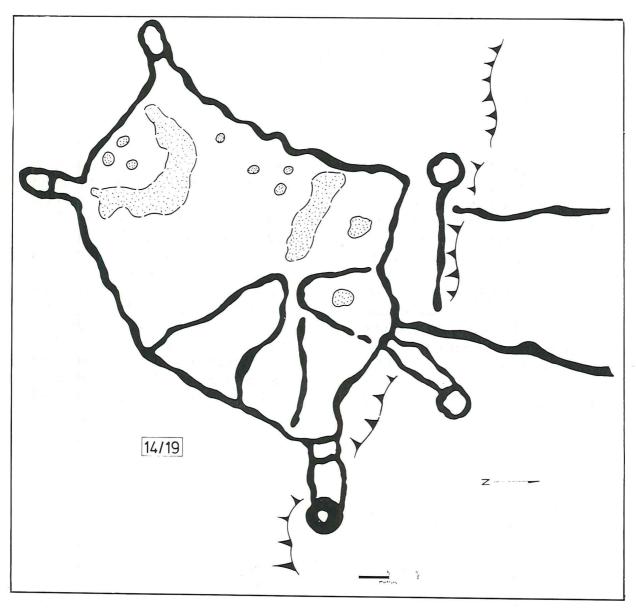


Fig. 2: Complex structure, "kite" enclosure with interior divisions.

from ancient lava flows provide an abundant supply of building stone. The area is one of low boulder-strewn plateaux broken by wadis which link together chains of mudflats. Most of the settlement, as evidenced by the remains of corrals and windbreaks, seems to have been along the margins of the mudflats where a loose scatter of boulders and a gentle slope provided ideal facilities for constructing accessable shelters just above winter flood level. These were made by means of bringing rocks together to form a wall -- rather than by clearing them away, a considerably more arduous task. Builders of the "jellyfish" however seem to have done just the opposite. They constructed

their sites well onto the basalt plateau, making access extremely difficult and necessitating the clearance of rocks and stones from quite an extensive area.

One conceivable reason for this inaccessability could be that the inhabitants may have felt the need to protect themselves either from predators or from other, perhaps belligerent peoples. At least three of the known examples (fig 6; LIII No.2; Helms 1981: PL 9) appear to have had quite elaborate entrances. The right-hand example illustrated in LIII No. 2 has a break in the outer wall. Two parallel walls about a metre apart form a passage which then turns abruptly at a right-angle, still

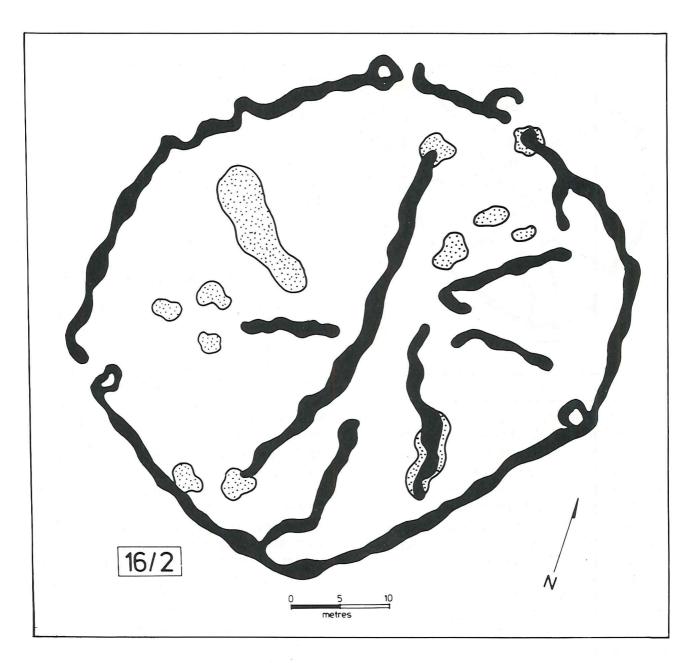


Fig. 3: "Jellyfish", Northern Wadi Rajil.

with a protecting interior wall and runs for another ten metres or so before giving access to the interior. The faint remains of a small hut circle can also be distinguished outside the entrance, possibly to protect it. An almost identical arrangement can be seen in the example illustrated by Helms (1981:pl 9). The only planned example with a similar feature is QMJ 14J (Fig 6). In this instance the interior passage is only about a metre long but particularly interesting is the fact that the opening to the interior is directly opposite the entrance to the central hut. It seems quite likely that

these entrances would fulfil a protective function.

It might be assumed with regard to the overall function of these structures that they were built by pastoralists-- possibly nomadic or even transhumant -- who used the interior divisions to hold animals at night, they themselves sheltering in the central enclosure or in the small huts on the perimeter wall. An obvious parallel for this is the African kraal (pl. LV No. 1-2). Local parallels for the "jellyfish" have been suggested by both Helms (1981:50) and Rees (1929). Helms points out the resemblance

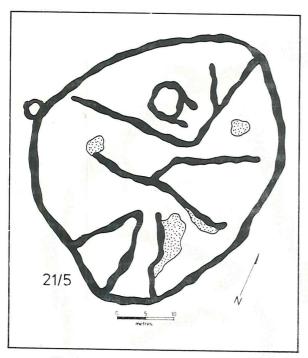


Fig. 4: "Jellyfish", Jebel Qurma

between the "jellyfish" and the round structure in Munhate III (Perrot 1964). This building is twenty metres in diameter with a large central enclosure paved with pebbles. Surrounding this lie a circle of rooms, roughly three by five and a half metres across, their backs forming the outer wall of the structure. The building belongs to the latest phase of the PPNB (pre-pottery neolithic B) at the site.

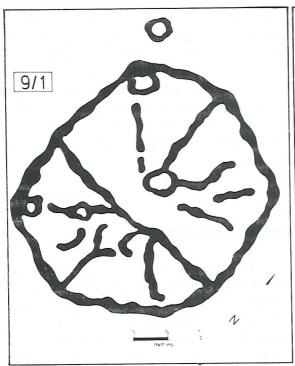
Rees did not mention "jellyfish" as such, but he both illustrates and describes very similar phenomena from the region around Azraq (pl. LIV). He mentions "circles of hut-circles" which he says are "old", that is stratified under and clearly predating cairns of the Safaitic/Roman period. These huts are now almost flush with the surface, appearing on the ground as mere heaps of stones, and Rees gives the diameter of the circles as approimately 50 paces. There is no evidence on his photographs for the radiating walls that characterise the "jellyfish" but in all other respects Rees is describing a very similar structure, right down to the standard diameter of 50 paces - just under 50 metres.

Unfortunately as yet survey work has not yielded any evidence for the date of the "jellyfish". The most positive proof that might be expected would be flint tools, but with one exception these sites have proved barren. This is not altogether unexpected since nomadic pastoralists such as even the modern beduin leave very few traces of their passing, and these mostly in the form of 'bio-degradable' objects of little use in the archaeological record. One exception is QMJ 14J. This site was located on a small basalt island whose shores are surrounded by corrals with Neolithic 'burin' material in them. A thin scatter of 'burins' was also found in the "jellyfish". This at least gives a final date for one example, though the 'final date' in this instance is merely a statement of the evidence as it has to be interpreted.

The "jellyfish" may have pre-dated the 'burin site' and rather than being contemporary, was merely re-used by later Neolithic peoples. That the 'burin sites' and the "jellyfish" should be contemporary is in any event unlikely as the majority of sites with Neolithic flints on them are corrals on the mudflat margins, showing no signs that their inhabitants felt the need to defend their settlements.

A second type of prehistoric site with links to the "jellyfish" is the desert "kite" -- in this instance literally. "Kites" are animal traps to be found in great numbers in the desert. They have long trailing walls or "arms" leading to an enclosure surrounded by "hides" to conceal the hunters.

One especially ubiquitous variety has been dated to the 6th/7th millenium (Helms 1981: 38; Betts 1982). In at least two instances "jellyfish" appear to be attached to "kite" walls. This is the case for example in QMJ 22 (fig 7). The problem however is whether the builders of the "jellyfish" borrowed the pre-existing wall of a disused "kite" for one side of their structure or whether paleo-hunters constructing one of the arms of their "kite" found the "jellyfish" in the way and simply incorporated it into their own wall. This same problem arises in the case of 14/19 (Fig. 2) which appears to be a total amalgamation of a "jellyfish" with a "kite" enclusure. Due to later disturbance the relative heights of the walls help very little in deciphering this structure. At one phase of its history it clearly was a "kite" as indicated



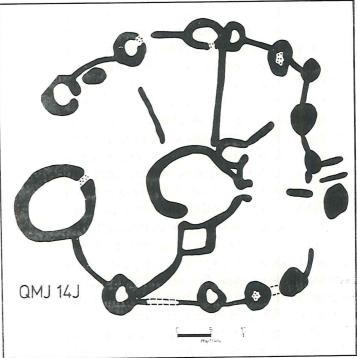


Fig. 5: "Jellyfish", Azraq area

Fig. 6: "Jellyfish", Wadi Selahib

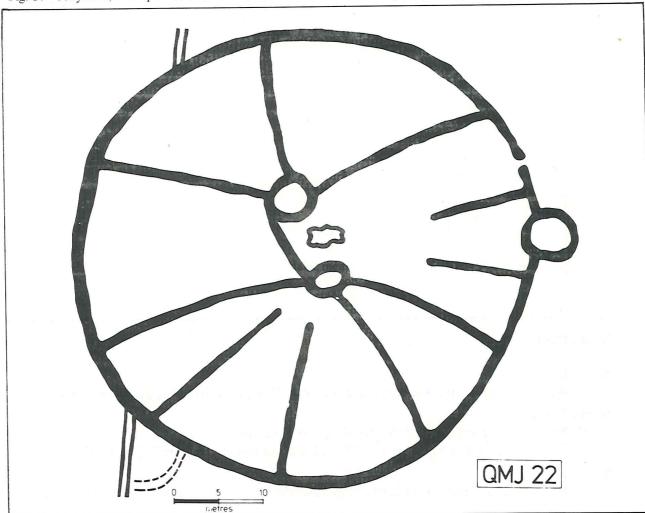


Fig. 7: "Jellyfish", Love Tree

by the trailing walls. However, the entrance to the enclosure is blocked by not only one but two walls effectively preventing its use as a trap -- unless by the time the "kite" was in use these crosswalls were degraded sufficiently as to present almost no obtacle. The converging walls within the enclosure would also make it less efficient as a trap unless they too were low enough to be ineffectual. It is possible -- but one cannot really say any more likely -- that since the basic structure of a "kite" enclosure and a "jellyfish" are essentially similar, an abandoned "kite" was merely converted to a "jellyfish" by the simple addition of interior divisions and the closure of the trap entrance. However this site is atypical in many ways and it is perhaps unwise to attempt too detailed an interpretation.

Evidence for dating then rests only on the highly tenuous information from QMJ 14J. If the theory that the "jellyfish" were built and used by pastoralists is correct -- as seems quite likely -- then they were probably not earlier than the eighth millenium. No close date is available as yet for the 'burin sites' and so a lower limit can only be set towards the middle of the 6th millenium. Sadly, because of lack of both soil cover and material remains, this may be the closest it will be possible to come in solving the problem of these rather strange structures.

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