

TWO NEW DOLMEN FIELDS IN THE ASH-SHAWBAK AREA

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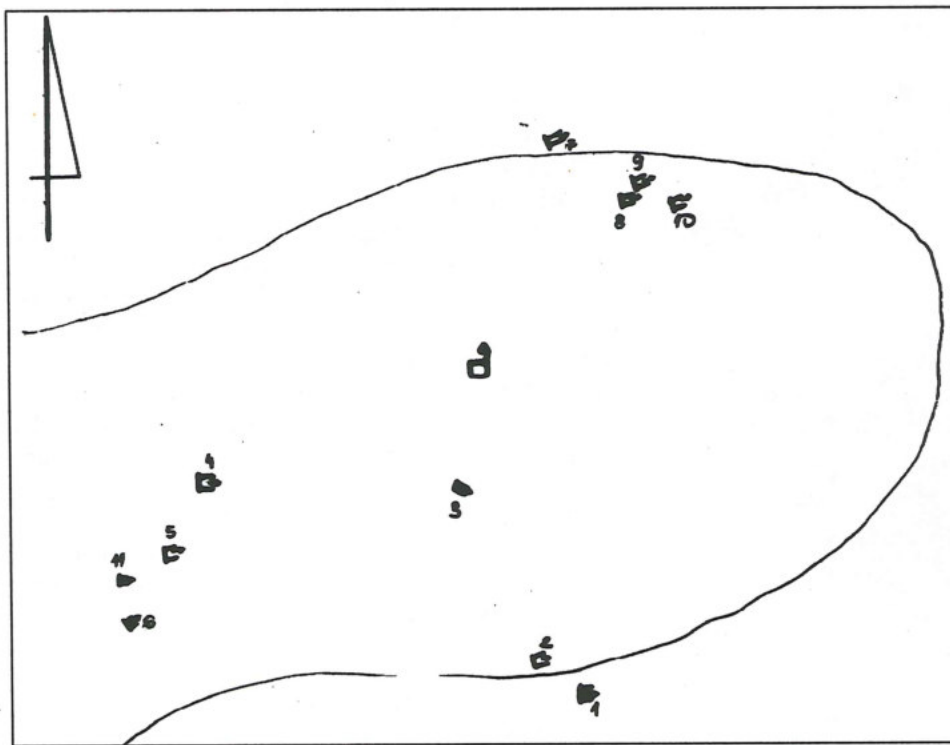
Over the ages, dolmens have attracted the curiosity and interest of almost everyone who has seen them. Travelers around the Levant in the eighteenth, and the nineteenth centuries made frequent mention of them. Since the end of the nineteenth century dolmens have made their way into the reports of geographers and more systematic surveyors. Even the fairly isolated ash-Shawbak (الشوبك) area was visited several times by different researchers, but the majority of them were attracted by the ash-Shawbak castle, and they failed to mention any dolmens in this area. Nelson Glueck conducted a detailed survey of the ash-Shawbak area in May 1934 (Glueck 1935: 88-94). He noted many Nabataean and Edomite sites in the area, but he did not mention any megalithic structures there. Neither Umm Tuwayrāt nor any site in vicinity of Umm Tuwayrāt appeared in his notes.

Umm Tuwayrāt (أم طويرات), situated 2km

south-east of ash-Shawbak castle, 1km south off the ash-Shawbak-Petra road, is mostly devoid of dolmens. Umm Tuwayrāt Site 1 was first seen and photographed by Mohammed Marahleh and Sami Nawafleh in 2000, and the current authors surveyed it in August 14-21, 2002. The primary goal of the survey was to make a detailed study of this dolmen field, its arrangement and type of structures. They also excavated a small sondage in order to learn about the origin, use and construction of the dolmens. All sites are located in UTM (Universal Transverse Mercator) zone 36, on the map. 3151.III (Shaubak).

Umm Tuwayrāt Site 1

Site 1 is located on a small spur overlooking the plain to the east, isolated from the surrounding higher hills by wadis. On the slopes of this spur 11 dolmens were found (Fig. 1), some in good condi-



1. Dolmen fields of Umm Tuwayrāt 1.

tion, some collapsed. There is also a water reservoir on the top.

Hilltop

Water Reservoir

UTME: 744609

UTMN: 3378598

Elevation: 1413m

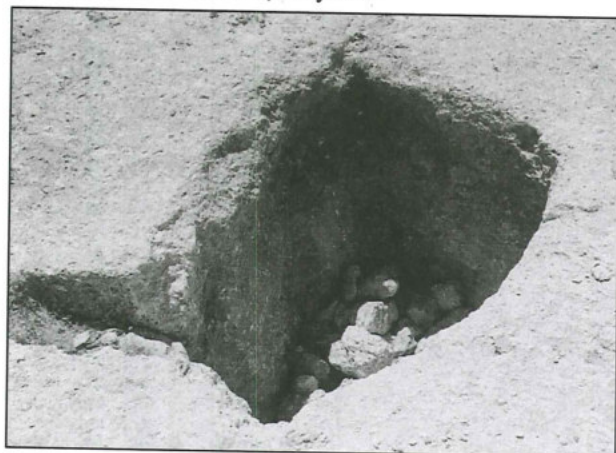
The structure cut into the bedrock on the hilltop is almost rectangular (3.12 x 2.79 x 2.92 x 2.73m) with the longer sides orientated south-north, to a depth of 0.45m (Fig. 2). In the north side, 1.2m from the NW corner, is cut a small round niche (12 x 21cm). In the east side, 46cm from the NE corner, is a second niche (34 x 40cm).

12cm from the NE corner starts a water channel. There is a small round pit at the beginning of the channel (62cm wide, but it is difficult to determine the depth — the bottom is unreachable). The channel is 161cm long, 24cm wide and 77cm in depth, running directly to the cistern (Fig. 3), the opening of the cistern is 153 x 102cm and its visible depth 115cm (cistern is filled by the cobbles).

No pottery or other artifacts were found in these



2. Water reservoir, Umm Ṭwayrāt 1.



3. Cistern, Umm Ṭwayrāt 1.

structures or in the immediate surrounding area.

They are the only structures on the spur-top.

South Slope of the Hill

Dolmen # 1

UTME: 744 551

UTMN: 33 78 538

Elevation 1406m

Orientation: 90o WE

Type 1b (according to Epstein typology — Epstein 1985: 23) or Zohar Type B (according to Zohar 1992: 45). There are two upright slabs, southern slab broken into two parts, and one collapsed outside the dolmen. The structure is closed by a third slab from the west and covered by the flat capstone. The entrance is from the east side, blocked by the one bigger slab on the right side and a few smaller ones. The upright slabs are situated directly on the bedrock, there is no floor slab. On the north side of the dolmen there is a kind of stone fence made out of two slabs. The dolmen, oriented east-west, is about 3m long, 2m wide and 1.6m high. The interior chamber is 1.64 x 1.39m, 0.77-1.10m high.

Dolmen # 2

UTME: 744 549

UTMN: 33 78 568

Elevation: 1407m

Orientation: 78o WE

Collapsed, only the broken capstone and a few collapsed side slabs are visible.

Dolmen # 3

UTME: 744 528

UTMN: 33 78 599

Elevation: 1413m

Orientation: 130o NW-SE

Type B (according to Zohar typology — Zohar 1992: 45). Two uprights on the north and one on the south are partly covered by a fragment of the capstone another fragment is resting on the back-side of the dolmen. The entrance from the south-east is blocked by the one bigger long slab on the left side and a few smaller ones, and a kind of the stone threshold-horizontal slab, upright slabs are situated directly on the bedrock, there is no floor slab. On the north side of the dolmen, outside, is a kind of stone fence made out of two slabs. The dolmen is about 2.9m long, 2.58m wide and 1m high, oriented east-west.

Dolmen # 4

UTME: 744 551

UTMN: 33 78 538

Elevation: 1408m

Orientation: 90° W-E

Type 1b (according to Epstein typology — Epstein 1985: 23) or Type B according to the Zohar typology (Zohar 1992: 45). There are two upright slabs creating the north side, one upright for the south side and is closed by a third from the west. There is a flat capstone lying on the uprights. The entrance from the east side is blocked by the one bigger slab on the left side and a few smaller ones, back slabs are situated directly on the bedrock, north side slabs are lying on the small stones, there is no floor slab, but bedrock is cut out creating a kind of the small basin in the front side. On the north side of the dolmen, outside, is a kind of the stone fence made out of two slabs. The dolmen is about 2.7m long, 3.2m wide and 1.3m high, oriented east-west (Fig. 4). This dolmen was examined in order to learn more about its construction. Nabataean pottery (Fig. 5, Table 1) and a coin were found. Probably the dolmen was reused in the Nabataean period. But there were also flints from the Chalcolithic/Early Bronze Age (Fig. 6) in the same stratum as Nabataean pottery.

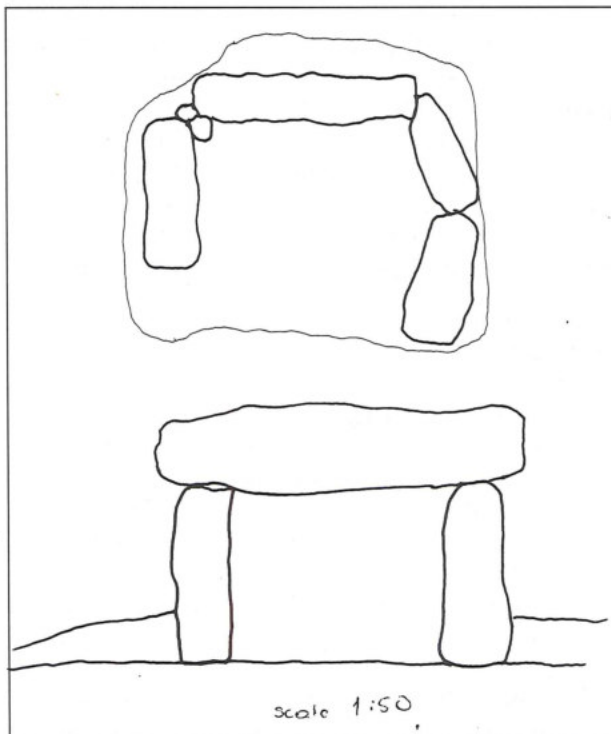
Dolmen # 5

UTME: 744 467

UTMN: 33 78 579

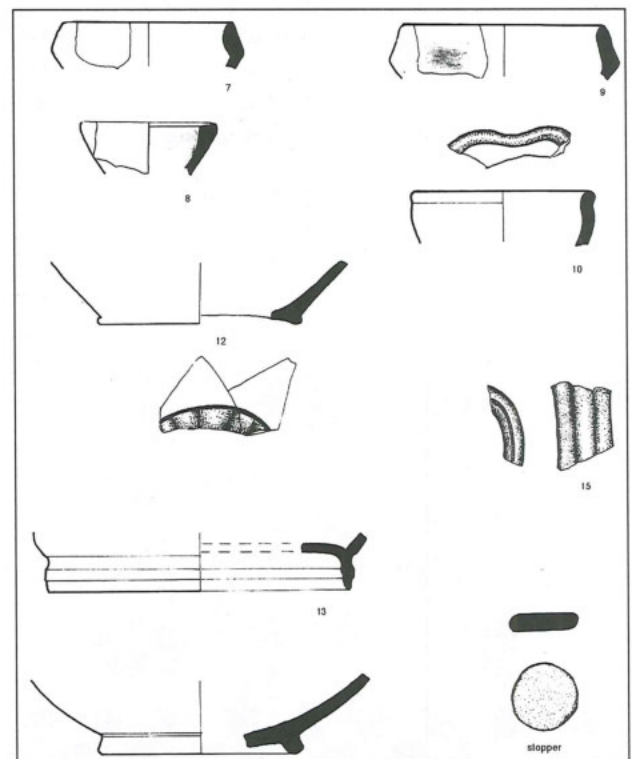
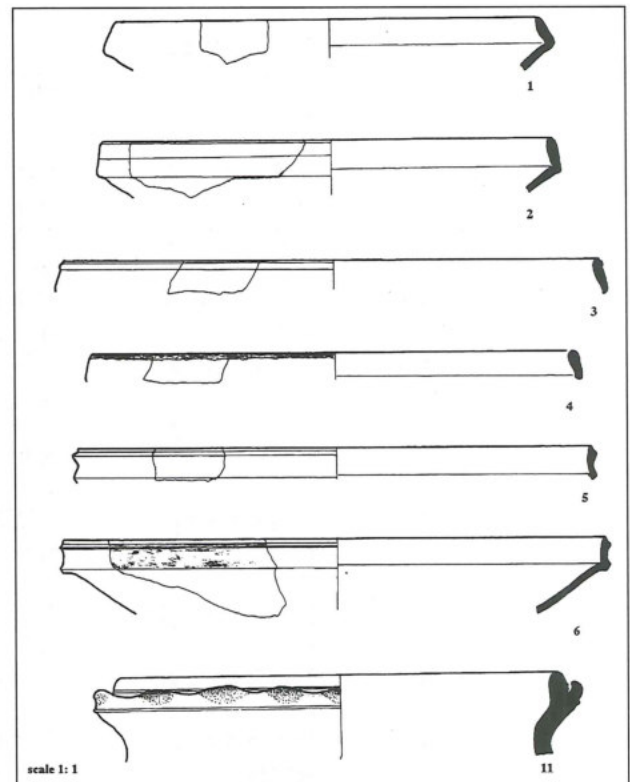
Elevation: 1407m

Orientation: 80° W-E



4. Dolmen No. 4, Type B, Umm Tuwayrāt 1.

This is a new type not mentioned in the Epstein typology (Epstein 1985) or in Zohar 1992. This could be a variation of the Zohar type B "four or more uprights, forming a closed rectangular or



5. Pottery from dolmen No. 4, Umm Tuwayrāt 1.

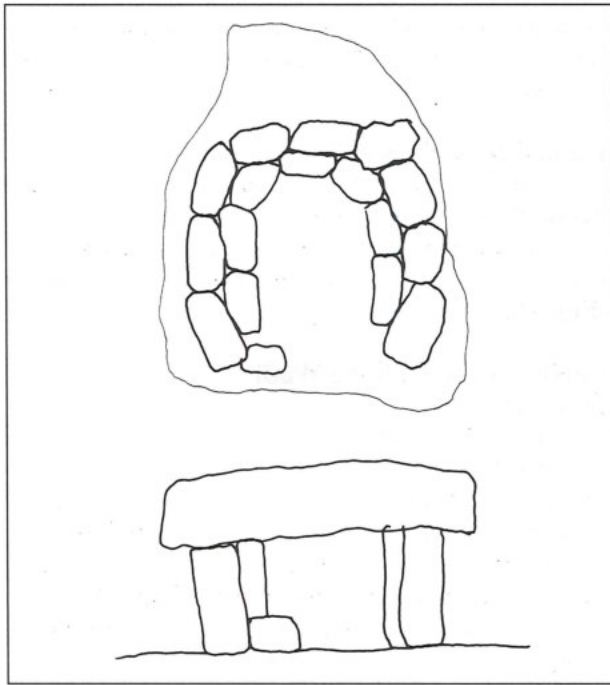
Table 1: Description of the pottery sherds

Dolmen	Reg No	Exterior	Core	Interior	Surface Treatment
4	S1.4.1	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	-
4	S1.4.2	5YR 6/6 reddish yellow	5YR 5/3 reddish brown	5YR 7/6 reddish yellow	-
4	S1.4.3	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	-
4	S1.4.4	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	ext. slip 7.5YR 8/2 pinkish white
4	S1.4.5	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	ext. slip 7.5YR 6/2 pinkish gray
4	S1.4.6	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	ext. slip 7.5YR 6/2 pinkish gray
4	S1.4.7	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	-
4	S1.4.8	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	ext. and int. slip 7.5YR 8/2 pinkish white
4	S1.4.9	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	black 5YR2.5/1 strip along carinated neck
4	S1.4.10	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	-
4	S1.4.11	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	slip 5YR 7/8 reddish yellow
4	S1.4.12	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	
4	S1.4.13	5YR 6/8 reddish yellow	5YR 6/8 reddish yellow	5YR 6/6 reddish yellow	
4	S1.4.14	7.5YR 7/6 reddish yellow	7.5YR 7/6 reddish yellow	7.5YR 7/6 reddish yellow	slip 7.5YR 8/4 pink
4	S1.4.15	2.5YR 6/8 light red	2.5YR 6/8 light red	2.5YR 6/8 light red	slip 7.5YR 8/4 pink
7	S1.7.1	2.5YR 6/6 light red	2.5YR 5/1 reddish gray	2.5YR 6/6 light red	slip 5YR 6/8 reddish yellow
7	S1.7.2	7.5YR 7/6 reddish yellow	7.5YR 7/6 reddish yellow	7.5YR 7/6 reddish yellow	slip 10YR 8/3 very pale brown



6. Flints from dolmen No. 4, Umm Tuwayrât 1.

sub-rectangular room with one or more capstone” Zohar 1992: 45). We have preliminarily described) it as a Type G (Fig. 7). The half-round plan is created by three rows of the uprights, each side consists of 3 slabs in three rows, and the back is made out of the 5 slabs in three rows. The capstone is resting on some of the slabs in the outer row some in the inner row — it is difficult to say which row has a structural function. The one bigger slab on the right side blocks the entrance from the east side, upright slabs are situated directly on the bedrock, and there is no floor slab. Dolmen is 3.3m long, 3m wide and 1.5m high, oriented east-west.



7. Dolmen Type G, Umm Tuwayrat 1.

Dolmen # 6

UTME: 744 464

UTMN: 33 78 569

Elevation: 1411m

Orientation: 80o W-E

This is another of our new type-Type G. The half-round plan is created by two rows of uprights, each side consists of 3 slabs in each row, and the back is made out of the 5 slabs in three rows. The capstone is resting on some of the slabs in the outer row some in the inner row—it is difficult to say which row has a structural function. The entrance is from the east side, and is blocked by the one bigger slab on the right side, upright slabs are situated directly on the bedrock, and there is no floor slab. Dolmen is 3.3m long, 3m wide and 1.1m high, oriented east-west.

Dolmen # 11

UTME: 744 472

UTMN: 33 78 582

Elevation: 1409m

Orientation: 90o W-S

Collapsed, only the capstone and a few collapsed side slabs are visible.

North Slope of the Hill

Dolmen # 7 (Fig. 8)

UTME: 744 524

UTMN: 33 78 668

Elevation: 1406m

Orientation: 60o NE-SW



8. Dolmen No. 7, Umm Tuwayrat 1.

This is the new type-Type G. The half-round plan is created by two rows of the uprights. The south side of the dolmen consists of 4 blocks in two rows, and the north side collapsed. The back-side from the west consists of one large inner slab and two additional outer rows of stones. A very long capstone (5.86m) is resting on the south and west slabs. The entrance from the east side is not blocked. Upright slabs are situated directly on the bedrock and there is no floor slab. This dolmen was also examined in order to learn more about its construction. Early Bronze I-II pottery was found (**Fig. 9, Table 1**), a globular form flint core and two fragments of human bones.

Dolmen # 8

UTME: 744 550

UTMN: 33 78 662

Elevation: 1408m

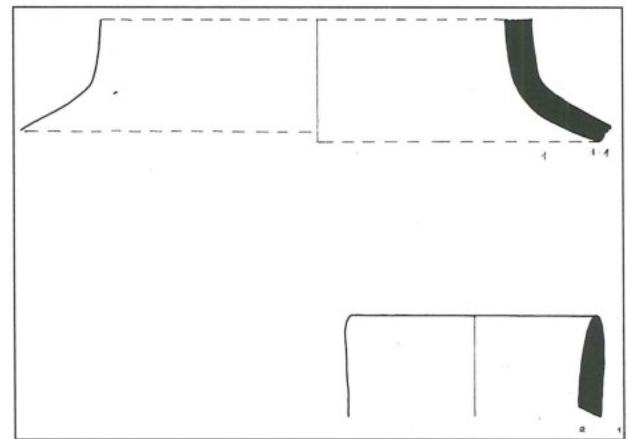
Orientation: 80o EW

Collapsed, only the capstone lying on three collapsed small side slabs is visible.

Dolmen # 9

UTME: 744 558

UTMN: 33 78 659



9. Pottery from dolmen No. 7, Umm Tuwayrat 1.

Elevation: 1408m

Orientation: 80° EW

Collapsed, only the capstone lying on three collapsed small side slabs is visible.

Dolmen # 10

UTME: 744 566

UTMN: 33 78 657

Elevation: 1412m

Orientation: 55° SW-NE

New type-type G. The half-round plan is created by two rows of uprights: each side consists of two slabs in each row, and the back is made out of four slabs in three rows. The capstone is resting on some of the slabs in the outer row some in the inner row — it is difficult to say which row has a structural function. The entrance from the east side is blocked by small stones, upright slabs are situated directly on bedrock, and there is no floor slab. Dolmen is about 3.4m long, 2.5m wide and 1.26m high.

During the 2002 survey season a second dolmen field was found nearby, 2km south-west from the first one.

Umm Tuwayrāt Site 2

Umm Tuwayrāt Site 2 is located on a hillside overlooking the convergence of two wadis.

One additional dolmen is situated across the wadi system opposite the main group of dolmens (Fig. 10).

North-East Side of the Wadi

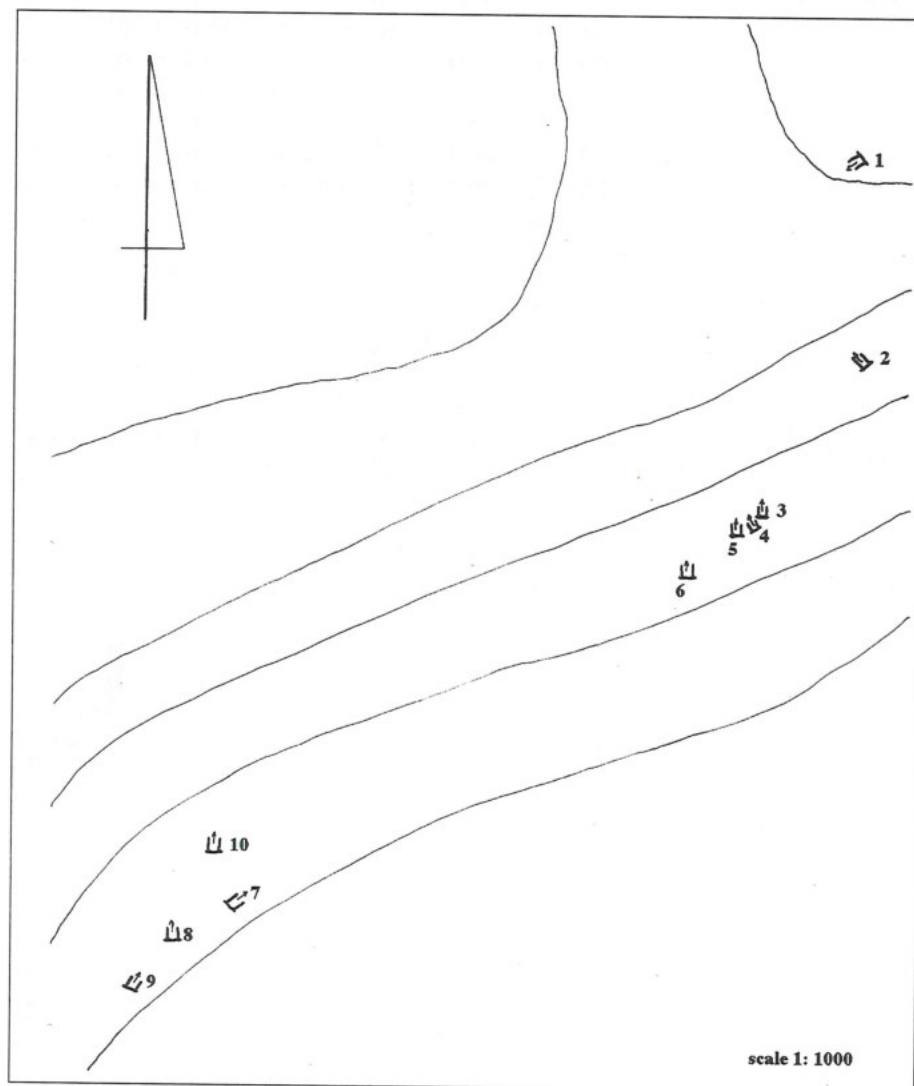
Dolmen # 1

UTME: 744 344

UTMN: 33 78 650

Elevation 1405m

Type B (according to the Zohar typology — Zohar 1992: 45). Two upright slabs are on the right side (one small *in situ*, one larger collapsed), three on the left side (one large collapsed) and closed by



10. Dolmen fields, Umm Tuwayrāt 2.

the two from the north-west, and a collapsed flat capstone. There are some remains, a few smaller stones, from the blockage of the entrance from the south-east side. Upright slabs are situated directly on the bedrock, and a floor is covered by the capstone. This dolmen is located on the north-east side of the wadi on the lower slope, opposite to the other dolmens.

South Side of the Wadi, lower Slope

Dolmen # 2

UTME: 744 336
UTMN: 33 77 616
Elevation: 1408m
Orientation: SE-NW-336o

This is the eastern most dolmen on the south part of the wadi. Probably type B, collapsed. Visible: back stone *in situ*, on the east side there are two slabs (one collapsed). On the west side slabs are not visible, and is covered by capstone. Also the entrance blockage stones are covered by the collapsed capstone. Floor consists of soil and small cobbles. No floor slab is visible.

Dolmen # 3

UTME: 744 329
UTMN: 33 77 607
Elevation: 1414m
Orientation: 0o S-N

Probably type B. Collapsed. Visible: back two rows of the single slabs *in situ*. Side slabs collapsed and not visible (covered by capstone). Also the entrance blockage stones are covered by collapsed capstone. Floor consists of soil and small cobbles. No floor slab is visible. The entrance, looking to the wadi, is from the north side.

Dolmen # 4

UTME: 744 344
UTMN: 3377 650
Elevation: 1415m
Orientation: 324o SE-NW

Probably type B. Collapsed. East side consists of two collapsed stone slabs, and the back block is *in situ*. West side: two stones—one *in situ*, and a second collapsed. Floor consists of soil and bedrock. The capstone is collapsed, lying NE from the structure. The entrance is on the north side facing towards the wadi.

Dolmen # 5

UTME: 744 344
UTMN: 3377 650
Elevation: 1414m
Orientation: 0o S-N

Construction type unknown, most probably type B. Collapsed, east side and west side covered by the collapsed capstone, and the back block is *in situ*. West side: two stones—one *in situ*, and a second collapsed. A floor is not visible. The entrance is on the north side facing towards the wadi.

Dolmen # 6

UTME: 744 344
UTMN: 3377 650
Elevation: 1416m
Orientation: 12o S-N

Probably type B. Collapsed, east and west side covered by a collapsed capstone. The two back slabs are *in situ*. A floor is not visible. The entrance is on the north side facing the wadi.

South Side of the Wadi, Upper Slope

Dolmen #7

UTME: 744 224
UTMN: 3377 520
Elevation: 1427m
Orientation: 50o SW-NE

This is the best-preserved dolmen in this site. Type B. North side consists of two uprights, the southern upright is visible only from inside, from outside the soil covers it almost to the capstone level, backside consists of at least two slabs, but there are a lot of smaller stones—it is difficult to recognize their function. The entrance from the north-east is blocked by smaller stones. On the entrance side inside the dolmen one long slab is lying parallel to the axis of the dolmen. This dolmen needs to be examined in order to understand better the construction and function of dolmens. This season was not long enough to complete this task.

Dolmen # 8

UTME: 744 213
UTMN: 3377 510
Elevation: 1428m
Orientation: 0o S-N

Probably type B with a stone circle around it. Collapsed. East side consists of two collapsed slabs. The west side slab is covered by the collapsed capstone. One of the back slabs is *in situ*. A floor is not visible. The entrance is on the north side facing towards the wadi.

Dolmen # 9

UTME: 744 203
UTMN: 3377 500
Elevation: 1429m
Orientation: 54o SW-NE
Very small one, capstone is not present and only

a little fragment inside the structure. Probably type B with stone circle around it. Collapsed, east side consists of two collapsed slabs, north-west side probably consists of two rows: one inner upright *in situ*, and an outer line *in situ*. There are also one inner back slab and two outer *in situ*. A floor is not visible, because fragments of the capstone cover it. The entrance is on the north-east side facing the first dolmen. This dolmen has a different orientation than the others, it is located parallel to the slope.

Dolmen # 10

UTME: 744 196

UTMN: 3377 511

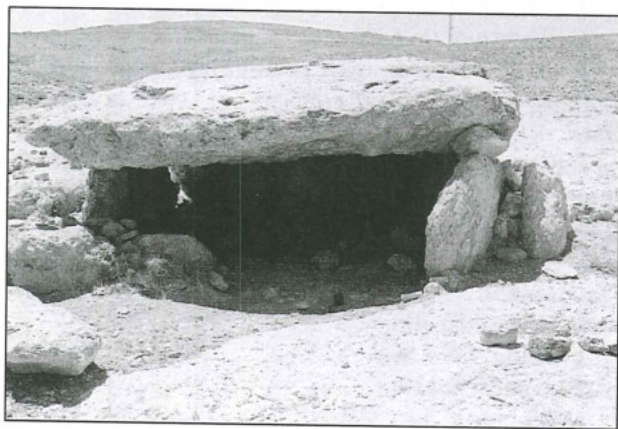
Elevation: 1425m

Orientation: 0o S-N

Collapsed. The backside consists of 3 cobbles. Side slabs have collapsed and are covered by the capstone. The entrance faces towards the valley.

The ash-Shawbak region dolmens are of two types. The first type is a variation of Zohar type B (Zohar 1992: 44-45) or Epstein type 1b (Epstein 1985: 23-25). This type of dolmen consists of two or more upright slabs along the side, one or more back slabs and a covering capstone (Fig. 11). The average measurements of the dolmens are: 1-1.6m in height, 2-4m in length and the slabs are 0.25-0.4m thick. As with all the other dolmens seen by the authors until now, there are no traces of mortar, but spaces in-between the slabs are often filled with small cobbles or by small slabs lying one on the top of the other. Stone slabs used in the construction appear to be naturally broken with the breaks occurring along pre-existing fractures called joints, which are geological in origin.

There are a few dolmens constructed according to another plan. There is a new type not mentioned before in Epstein's typology (Epstein 1985: 23-25) or in Zohar (Zohar 1992: 44-45). This could be a



11. Dolmen Type B, Umm Tuwayrāt 1.

variation of the Zohar type B "four or more uprights, forming a closed rectangular or sub-rectangular room with one or more capstone (Epstein's Types 1b, 2, 3, 4 and 5)" (Zohar 1992: 45). We have described it as Type G. It consists of a round plan created by two or three rows of uprights: each side consists of 3 slabs in each row, the back is made out of 3-5 slabs in two or three rows. The capstone rests on some of the slabs in the outer row some in the inner row—it is difficult to say which row has a structural function.

Most of the dolmens are covered by capstones. All of the capstones are flat slabs made of the naturally broken unmodified blocks. Most have a length only slightly longer than the dolmen but the capstone covering dolmen No. 7 is 5.86m long. Only capstones of two dolmens (dolmen 4 and 7) appeared to have cup-holes (about 10cm in diameter), hollows or channels carved in the surface, which were probably contemporary with their construction. They were probably made artificially or the natural holes were deepened.

Most of the dolmens are open at one side. But there are remains of blockages, which usually consisted of one bigger and a few smaller stones. Dolmens found on the other sites were blocked by a different way: by so-called "porthole" — the front side of dolmens were closed by upright slab, in which the regular rectangular one or sometimes two holes were hewn, like it was in Dāmiyah (Yassine 1988: 47-54). The other kind of blocking is so-called dry walls (for example this kind of blocking on the dolmen from Tall al-'Umayrī (Dubis and Dabrowski 2002: 172), or by organic material, for example wood, which has not been preserved. But even then the entrance side is very clearly visible.

The orientations of the dolmens and megaliths, in general to the cardinal points, have often been regarded as being very important. Most of the Umm Tuwayrāt 1 dolmens are orientated E-W with the entrance to the E or orientated to the NE-SW with the entrance to the NE. But this is not the case for the Umm Tuwayrāt 2 dolmen field. The dolmens there are orientated NS, NW-SE, or NE-SW with the entrance facing to the open space at the crossing of two wadis.

No floor slabs were found in the Umm Tuwayrāt dolmen fields, they are constructed directly upon the bedrock. There are also no traces of subterranean chambers. At Dāmiyah below the floor of one of the dolmens were thick slabs covering a second small burial chamber, which contained the remains of an EB I burial (Yassine 1988: 49). In the 'Irāq al-Amīr the floor of one of the dolmens was sunk into the ground (Chang-Ho. Ji

1997: 50), but no burial remains were found. Mortensen reported that the dolmens found around Mount Nebo had burials lying below the floor stones in the chamber cut into the bedrock (Mortensen 1998: 90, Fig. 22). Also the dolmen field at al-Murayghāt had one similar feature (Dubis and Savage 2001: 95).

Many of the dolmens found in Levant were built on a round or oval platforms made of unhewn stones of approximately same size. But often instead of the terraces or platforms dolmens were surrounded by one or few stone circles. This is the case with the ash-Shawbak dolmens. Some of them are surrounded by one stone circle. But there are features that are also not full circles but a kind of stone fence consisting of one or two slabs. Zohar suggests that: "small circles may indicate a restricted area around the tomb, signifying sacred ground comparable to a *temenos* surrounding a temple") (Zohar 1992: 47).

Pottery found at ash-Shawbak in general dated to the Early Bronze Age (found in dolmen 7), Iron Age and Roman/Byzantine (from the surface collection) and Nabataean sherds (found in dolmen 4). There are also lithics, mostly typical of a Chalcolithic/ Early Bronze Age assemblages.

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