# NEW RESULTS ON ANCIENT SETTLEMENT PATTERNS IN THE SOUTH-EASTERN QADISIYAH REGION (IRAQ). THE 2016-2017 IRAQI-ITALIAN QADIS SURVEY PROJECT

#### Nicolò Marchetti<sup>a</sup>, Ahmed Abbas<sup>b</sup>, Haider La'ebi<sup>b</sup>, Basim Jabbar<sup>b</sup>, Marco Valeri<sup>a</sup>, Federico Zaina<sup>a</sup>

<sup>a</sup> Department of History and Cultures, University of Bologna, 2 Piazza S. Giovanni in Monte, 40124 Bologna, Italy <sup>b</sup> State Board of Antiquities and Heritage, Iraq

#### **INTRODUCTION**

The QADIS survey project is a joint initiative of the Alma Mater Studiorum - University of Bologna and the State Board of Antiquities and Heritage (SBAH). The findings presented here were analyzed in the frame of the EU funded project "EDUU - Educational and Cultural Heritage Enhancement for Social Cohesion in Iraq" (EuropeAid CSO-LA/2016/382-631).

The first, second and third field seasons took place in January and October 2016 and in January 2017 respectively. We report here on the general survey activities of the first two seasons, providing detailed information on 40 sites newly identified in addition to Adams 1981. The survey area (Fig. 1) follows the administrative borders of the region of Qadisiyah to the South and East (including part of the Delmej basin), and it stops around the town of Afak to the North-West.<sup>1</sup>

Key words : settlement , survey , qadis .

In our area, previous surface surveys have been carried out in 1902 in the Fara environs (Andrae 1903), in 1925-1926 and in 1968 in an area larger than our own (Dougherty 1926; Al-Shukri 1974), while between 1968 and 1975 Adams' survey developed on the ground (Adams 1981; the southern fringe of the QADIS area is covered by Adams and Nissen 1972). As for the excavations, between 1903 and 1905 Adab was extensively excavated (Wilson 2012), while in 1977 a single season was carried out at Umm al-Hafriyat (Gibson 1977/78). After both the 2<sup>nd</sup> and 3<sup>rd</sup> Gulf Wars, in extremely difficult conditions for the management and preservation of the archaeological heritage (see especially Emberling and Hanson 2008 on the looting peak which occurred between 2003 and 2007), the State Board of Antiquities and Heritage (SBAH) carried out several regular or emergency

excavations at the sites of Tell Dhuhaia, Bismaya/Adab (Al-Doori *et al.* 2001-2002), Tell Mirza, Tell Ruejeh and Tell Delmej 1-2 in the Delmej Basin, Tell al-Akhader, Tell Abu Edan, Tell el-'Arris (along the Afak-Al Budayr road) and Tell Drehem/Puzrish-Dagan (Al-Mutawalli and Shalkham 2014).

The main aims of the QADIS project are to produce a new understanding of a multi-layered archaeological landscape through cutting-edge documentation techniques, to plot – with the greatest possible detail – urban plans from visible surface remains coupled with their fine chronological attribution through systematic collections of surface materials (which also define the functional interpretation of the urban sectors), to connect epigraphic sources with settlement patterns, to map the landscape of silted channels also studying its historical development and, in general, to check and update the bulk of Adams' seminal results through an integrated survey methodology (Marchetti *et al.* in press a; in press b).

#### **RESULTS OF THE 2016-2017 SURVEY SEASONS**

The 2016-2017 campaigns focused on a large area extending from Tell Drehem and the Delmej reservoir to the N-NW until Bismaya/Adab and Tell Jidr/Karkar to the SE (Fig. 1) (Marchetti *et al.* in press a; in press b).<sup>2</sup>

#### 1. QADIS NO.: QD003

MODERN NAME: Tell Abu Rus

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): 5383836.00 m E 3544937.00 m N DIMENSIONS: 235 m length, 104 m width, 2 ha area

CHRONOLOGICAL PHASES: Sasanian, Islamic

DESCRIPTION: Site of oval shape, with a main mound (89x71m) to the northwest. A thin crust of salt covers the entire surface of the site while scattered bushes are clustered in the center of the site. Tell Abu Rus is delimited to the north and west by modern canals.

#### 2. QADIS NO.: QD004

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 533428.00 m E 3555389.00 m N

DIMENSIONS: 210 m length, 180 m width, 3 ha area

CHRONOLOGICAL PHASES: Sasanian, Islamic

DESCRIPTION: Site of oval shape. A layer of sand and dust covers the entire surface of the site. No agricultural activities and modern buildings and streets are attested. The site is delimited to the South, West, North and East by modern canals and fields.

# **3. QADIS NO.: QD005** (Fig. 4)

MODERN NAME: Tell Meya'h

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 541248.00 m E 3541200.00 m N

DIMENSIONS: 320 m length, 289 m width, 7.5 ha area

CHRONOLOGICAL PHASES: Ur III, Isin-Larsa, Old Babylonian

DESCRIPTION: Double mounded site of circular shape cut NW-SE by an old paleochannel. The western mound is quite high, while the eastern one is lower. The soil is characterized by thin crust of clay and silt and the lower town is densely covered by bushes. Cultivated fields are located all around and they partially damage the site to the SE. Looting pits are rarely found on the western mound, while more frequent on the eastern one.

# 4. QADIS NO.: QD006

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 529788.00 m E 3546011.00 m N

DIMENSIONS: 360m length, 190 m width, 6.3ha area

CHRONOLOGICAL PHASES: Unknown

DESCRIPTION: Site of oval shape. A layer of sand completely covered the entire surface of the site, which is surrounded by cultivated fields and modern irrigation canals. Few sickle blades have been found throughout the site.

# 5. QADIS NO.: QD007a

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 545359.04 m E 3548776.99 m N

DIMENSIONS: 633 m length, 255 m width, 10.5 ha area

CHRONOLOGICAL PHASES: Ur III

DESCRIPTION: Large low mound of elongated shape, NW-SE oriented. On the surface traces of sand and silt are still visible. The site is cut by the Third river to the south while modern cultivated fields are located on the North and South-east.

# 6. QADIS NO.: QD007b

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Afak COORDINATES (UTM WGS84): Zone 38S, 545622.00 m E 3548812.00 m N DIMENSIONS: 152 m length, 182 m width, 2.4 ha area

# CHRONOLOGICAL PHASES: Ur III

DESCRIPTION: Small low mound of irregular shape, NW-SE oriented. On the surface, traces of sand and silt are still visible. Modern cultivated fields are located on the north end south-east. The paleochannel is located on the south-west side.

# 7. QADIS NO.: QD007c

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 545713.00 m E 3548648.00 m N

DIMENSIONS: 117.5 m length, 93 m width, 0.9 ha area

CHRONOLOGICAL PHASES: Ur III

DESCRIPTION: Small low mound of pseudo-circular shape, oriented NW-SE. On the surface traces of sand and silt are visible. Modern cultivated fields are located to the North and to the South-east. The paleochannel is located on the South-west.

# 8. QADIS NO.: QD008a

MODERN NAME: Tell Fakhar

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 532365.59 m E 3543048.00 m N

DIMENSIONS: 137 m length, 97 m width, 0.9 ha area

CHRONOLOGICAL PHASES: Ur III, Isin-Larsa, Old Babylonian, Kassite

DESCRIPTION: Site of oval shape. A layer of sand and dust covers the entire surface of the site. The site is cut to the South by a modern village while to the East by agricultural fields.

# 9. QADIS NO.: QD008b

MODERN NAME: Tell Fakhar

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 532075.96 m E 3542902.06 m N

DIMENSIONS: 200 m length, 105 m width, 1 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Islamic

DESCRIPTION: Probably the latest tell of a four mounds site. Site of oval shape delimited to the South by a modern street, to the East by modern village and to the North by modern fields.

#### **10. QADIS NO.: QD009** (Fig. 3)

MODERN NAME: Tell Gharnug REGION AND DISTRICT: Qadisiyah, Afak COORDINATES (UTM WGS84): Zone 38S, 545515.00 m E 3552729.00 m N DIMENSIONS: 200 m length, 151 m width, 2.3 ha area

CHRONOLOGICAL PHASES: Jemdet Nasr, Early Dynastic I-II, Isin-Larsa, Old Babylonian, Kassite

DESCRIPTION: Very small site of pseudo-circular shape almost totally flat. The area is partially flooded during the winter season due to the presence of the artificial reservoir (Delmej). Salt and sand are mixed with wet clay. On the site an impressive amount of sickle blades have been also found.

#### **11. QADIS NO.: QD010**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 527646.00 m E 3547794.00 m N

DIMENSIONS: 254 m length, 124 m width, 3.8 ha area

CHRONOLOGICAL PHASES: Islamic

DESCRIPTION: Site of irregular shape, with one main mound (124x149 m and approximately 2.5 m high). Agricultural activities probably damaged the southeastern and northwestern limits. Traces of ancient buildings can be hypothesized from satellite images throughout the site.

#### **12. QADIS NO.: QD011**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 539492.00 m E 3540586.00 m N

DIMENSIONS: 300 m length, 191 m width, 4.4 ha area

CHRONOLOGICAL PHASES: Isin-Larsa, Old Babylonian

DESCRIPTION: Small site of pseudo-circular shape. The site has been identified after the works for the construction of the mosque, as it was buried by a thick packing of clay (about 1.5-2 m). In addition, agricultural fields damaged the extreme western limit of the site, while a modern street running along the channel cover part of the site. Material are mostly coming from the dumps of the building.

# **13. QADIS NO.: QD012**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 534136.53 m E 3557250.70 m N

DIMENSIONS: 400 m length, 290 m width, 8 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian

DESCRIPTION: Site of irregular shape (almost oval). There are many modern canals for agriculture. Very low pottery density.

# **14. QADIS NO.: QD040**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 539999.00 m E 3536757.00 m N

DIMENSIONS: 121 m length, 99 m width, 0.8 ha area

CHRONOLOGICAL PHASES: Ottoman

DESCRIPTION: Site of circular shape. Presence of two modern canals and a street cutting the site to the north and to the south. No looting has been observed. A cluster of pottery slags have been documented to the north.

# 15. QADIS NO.: QD041

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 543288.00 m E 3536237.00 m N

DIMENSIONS: 60 m length, 32 m width, 0.2 ha area

CHRONOLOGICAL PHASES: Neo-Babylonian, Isin-Larsa, Old Babylonian

DESCRIPTION: Small site of oval shape. The site is heavily pitted by looters, and in its northern part there was a huge bulldozer cutting. High density of materials (off-site scatter) have been documented between Qd041 and Qd042.

# **16. QADIS NO.: QD042**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 543385.00 m E 3536450.00 m N

DIMENSIONS: 121 m length, 48.5 m width, 0.5 ha area

CHRONOLOGICAL PHASES: Unknown

DESCRIPTION: Small site of elongated shape. A small modern channel is cutting the site in the north-western corner. The site is heavily pitted by looters, and in its southern part there were traces of a bulldozer cutting.

# 17. QADIS NO.: QD043

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 544357.00 m E 3538342.00 m N

DIMENSIONS: 248 m length, 176 m width, 3 ha area

CHRONOLOGICAL PHASES: Parthian

DESCRIPTION: Site of circular shape located on the two banks of an paleochannel. The western part of the site provided low pottery, while

the eastern part was richer. There is a Bedu house in the center of the site and a modern channel cut the south-eastern corner of the site.

# **18. QADIS NO.: QD044**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 546147.00 m E 3537659.00 m N

DIMENSIONS: 341 m length, 192 m width, 4.65 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Neo-Babylonian DESCRIPTION: Site of oval shape. Presence of a modern channel cutting the site on the west side. A modern street cuts the site on the north limit. Few pottery recorded and some bricks.

# **19. QADIS NO.: QD045**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 544827.00 m E 3538633.00 m N

DIMENSIONS: 127 m length, 54 m width, 0.57 ha area

CHRONOLOGICAL PHASES: Ottoman

DESCRIPTION: Small and flat site of rectangular shape cut by a modern canal to the north and another one to the east. Agricultural activities are widely attested all around the site. Few pottery was found during the visit at the site.

# 20. QADIS NO.: QD046

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 544714.00 m E 3537547.00 m N

DIMENSIONS: 685 m length, 279 m width, 17 ha area

CHRONOLOGICAL PHASES: Uruk, Early Dynastic I

DESCRIPTION: Site of oval elongated shape cut (from north-west to south-east) by a big modern channel. The whole site was also affected by agricultural activity. A high amount of pottery has been collected.

# 21. QADIS NO.: QD047

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Al-Budayr COORDINATES (UTM WGS84): Zone 38S, 555273.00 m E 3532434.00 m N DIMENSIONS: 378.5 m length, 234 m width, 7.6 ha area CHRONOLOGICAL PHASES: Unknown DESCRIPTION: Site of oval shape cut by one (or more) ancient and some modern channels. Part of the whole area was subjected by modern cultivations and looting pits.

#### 22. QADIS NO.: QD050

MODERN NAME: Tell Abu Feiseh

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 544062.00 m E 3534017.00 m N

DIMENSIONS: 224.5 m length, 206 m width, 4 ha area

CHRONOLOGICAL PHASES: Ottoman, Parthian, Sasanian, Neo-Babylonian, Kassite, Old-Babylonian, Ur III

DESCRIPTION: Site of circular shape cut by three modern channels. Presence of an paleochannel dividing the site in two parts. No sickles, slag and stone were found. The site was heavily affected by agricultural activities and looting.

# 23. QADIS NO.: QD051

MODERN NAME: Tell El Heez

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 541900.00 m E 3538598.00 m N

DIMENSIONS: 60.5 m length, 53.5 m width, 0.3 ha area

CHRONOLOGICAL PHASES: Ottoman, Parthian, Sasanian, Neo-Babylonian, Early Dynastic I-III

DESCRIPTION: Small site of circular shape. Northern edge partially bulldozed. Intense agricultural activity canalization is attested all around and inside the site. Few pottery was documented.

# 24. QADIS NO.: QD052a (Fig. 5)

MODERN NAME: Tell Algrna

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 550564.00 m E 3532782.00 m N

DIMENSIONS: 272.5 m length, 181 m width, 4 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Neo-Babylonian, Isin-Larsa, Old Babylonian, Early Dynastic I-III, Jemdet Nasr

DESCRIPTION: Site of oval shape divided in two parts by a modem channel. Agricultural activities are attested. Presence of some sickles blades and bricks. Many looting pits are attested.

# 25. QADIS NO.: QD052b

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Al-Budayr COORDINATES (UTM WGS84): Zone 38S, 550843.00 m E 3532927.00 m N DIMENSIONS: 127 m length, 115 m width, 1.1 ha area

CHRONOLOGICAL PHASES: Ottoman, Parthian, Sasanian, Isin-Larsa, Old Babylonian

DESCRIPTION: Site of circular shape. Agricultural activities and modern channeling are attested. Several looting pits are attested.

#### 26. QADIS NO.: QD052c

MODERN NAME: Tell Abu Thkera

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 551112.00 m E 3533013.00 m N

DIMENSIONS: 306 m length, 305 m width, 7.1 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Isin-Larsa, Old Babylonian

DESCRIPTION: Site of circular shape. Presence of modern channels, agricultural activity and looting pits. Many slag and few stone fragments have been also found.

#### 27. QADIS NO.: QD052d

MODERN NAME: Tell Alskeri

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 551231.00 m E 3532478.00 m N

DIMENSIONS: 602.5 m length, 335 m width, 14.1 ha area

CHRONOLOGICAL PHASES: Ottoman, Parthian, Sasanian

DESCRIPTION: Site of oval shape mostly consisting of an early 20<sup>th</sup> century Ottoman fortress. Modern channels and agricultural activity damage part of the site. Some looting pits are also attested.

# 28. QADIS NO.: QD053

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Al-Budayr COORDINATES (UTM WGS84): Zone 38S, 547993.00 m E 3532317.00 m N DIMENSIONS: 43.5 m length, 40 m width, 0.2 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Neo Babylonian, Kassite

DESCRIPTION: Small site of circular shape cut by a modern road. Very few pottery collected.

# **29. QADIS NO.: QD054a**

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Al-Budayr COORDINATES (UTM WGS84): Zone 38S, 552624.00 m E 3527591.00 m N DIMENSIONS: 140 m length, 123 m width, 1.25 ha area CHRONOLOGICAL PHASES: Parthian, Sasanian, Neo-Babylonian, Isin-Larsa, Old Babylonian, Early Dynastic I-III

DESCRIPTION: Site of circular shape. Agricultural activities as well as a some modern channels damage the south-western part of the site. Sickle blades, some stone fragments and slag are widely attested throughout the site.

# 30. QADIS NO.: QD054b

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 552624.00 m E 3527591.00 m N

DIMENSIONS: 162 m length, 107 m width, 1.5 ha area

CHRONOLOGICAL PHASES: Uruk, Jemdet Nasr, Ur III

DESCRIPTION: Site of oval shape. Presence of more than one modern channel all around the site: one of this is cutting the site in the north-western part. No looting activity attested. Many sickle blades are attested but not slag or stone fragments.

# 31. QADIS NO.: QD054c

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 552377.00 m E 3527869.00 m N

DIMENSIONS: 51 m length, 50.5 m width, 0.2 ha area

CHRONOLOGICAL PHASES: Ottoman

DESCRIPTION: Site of circular shape. Presence of modern channels and agriculture all around the site. Only few pottery sherds found on the surface.

# **32. QADIS NO.: QD055**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 545913.00 m E 3544913.00 m N

DIMENSIONS: 251 m length, 220.1 m width, 4.27 ha area

CHRONOLOGICAL PHASES: Neo-Babylonian

DESCRIPTION: Site of circular shape. Presence of modern channels and agriculture all around the site. Very few pottery sherds collected.

# **33. QADIS NO.: QD056**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 539089.00 m E 3548606.00 m N

DIMENSIONS: 305 m length, 90 m width, 2.5 ha area

CHRONOLOGICAL PHASES: Early Dynastic I-III

DESCRIPTION: Site of irregular shape (mainly elongated shape with the western and eastern ends more roundish). Presence of modern canalizations connected to the agricultural activity. Few pottery and some broken mud-bricks are attested. No evidence of looting.

# **34. QADIS NO.: QD057**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 539470.00 m E 3549932.00 m N

DIMENSIONS: 138 m width (diameter), 1.9 ha area

CHRONOLOGICAL PHASES: Unknown

DESCRIPTION: Site of circular shape. Two modern channels and some agricultural fields cut partially affect the site. Few looting pits are attested. Surface materials include many pottery sherds, some bricks, few slags and stone fragments.

# **35. QADIS NO.: QD058**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 537409.00 m E 3548394.00 m N

DIMENSIONS: 63.5 m length, 56 m width, 0.25 ha area

CHRONOLOGICAL PHASES: Early Dynastic I

DESCRIPTION: Site of oval shape, recently destroyed by agricultural and bulldozer activity. No looting pits are visible and few pottery, slag and stone fragments have been documented.

# 36. QADIS NO.: QD059 (Fig. 6)

MODERN NAME: Qala'at Ashur

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 536812.00 m E 3547383.00 m N

DIMENSIONS: 20 m length, 9 m width, 0.01 ha area

CHRONOLOGICAL PHASES: Ottoman

DESCRIPTION: Probably recent Qala'at (fortress?) in ruins. A single circular tower made of mudbrick still preserved.

# **37. QADIS NO.: QD060**

MODERN NAME: none REGION AND DISTRICT: Qadisiyah, Afak COORDINATES (UTM WGS84): Zone 38S, 536583.00 m E 3549020.00 m N DIMENSIONS: 162 m length, 118.5 m width, 1.5 ha area CHRONOLOGICAL PHASES: Parthian, Sasanian, Islamic DESCRIPTION: Site of oval shape surrounded by modern canalization and agricultural activities. Surface materials include many pottery fragments as well as some stone and glass objects. No looting activity was observed.

#### **38. QADIS NO.: QD061**

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Afak

COORDINATES (UTM WGS84): Zone 38S, 536795.00 m E 3548716.00 m N

DIMENSIONS: 241 m length, 197.5 m width, 3.8 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian, Islamic

DESCRIPTION: Site of oval shape with a mound in the center of it. Some looting pits are visible in the entire area.

#### **39. QADIS NO.: QD062**

MODERN NAME: Karit el-Bedur

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 535035.00 m E 3540003.00 m N

DIMENSIONS: 166.20 m length, 132.8 m width, 1.67 ha area

CHRONOLOGICAL PHASES: Ottoman, Parthian, Sasanian, Old Babylonian, Ur III

DESCRIPTION: Site of oval shape. Looting pits are visible in the entire surface of the site. The majority of materials, including pottery, slags and stone fragments, come from the looting pits.

#### 40. QADIS NO.: QD065

MODERN NAME: none

REGION AND DISTRICT: Qadisiyah, Al-Budayr

COORDINATES (UTM WGS84): Zone 38S, 545367.00 m E 3530107.00 m N

DIMENSIONS: 164.37 m length, 146.8 m width, 1.93 ha area

CHRONOLOGICAL PHASES: Parthian, Sasanian

DESCRIPTION: Site of circular shape located south of a paleochannel. One modern channel cuts the western part of the site. Several looting pits have been cut in the northern part of the site.

# DISCUSSIONS AND CONCLUSIONS

The new data collected during the 2016 and 2017 campaigns of the QADIS survey project indicate a higher settlement density especially as far as the late 3<sup>rd</sup> - early 2<sup>nd</sup> millennium BC and the Parthian-Sasanian periods are concerned (Fig. 2). Most of the sites exposed are very small, flat and often very difficult to identify without the support of satellite imagery. Moreover, many of them are severely damaged by modern crop or looting. Along with the new sites exposed, remote

sensing analysis using aerial photographs and satellite imagery, allowed to identify a more complex hydraulic landscape system and probably a substantial waterway hierarchy. Researches on this subject are still ongoing and the results will be published in the near future.

#### NOTES

The friendly and unfailing cooperation of the Chairman, Oais Rasheed, and the other Colleagues at the State Board of Antiquities and Heritage in Baghdad are here gratefully acknowledged. Additional fundings for the two survey seasons was provided by the Alma Mater Studiorum – University of Bologna and the Italian Ministry of Foreign Affairs (DGPS directorate  $-6^{th}$  Office), while the Ludwig Maximilian University of Munich (LMU) contributed to the second season. We are very grateful to the diplomatic personnel of the Italian Embassy in Baghdad and the local Authorities and the many friends in Diwaniyah and Afak for their warm reception and constant support. In addition to the authors, the following members took part in the second survey season: Valentina Gallerani, Christoph Fink, Hardy Maass, Ahmed Kareem, Ahmed Ali, Ali Feles, Haneen Taher, Munna Maki. Google Earth Pro and Bing Maps are registered trademarks. The authors for each paragraph have been here identified by their initials.

<sup>2</sup> The dates proposed in this paper for each site must be considered as preliminary. Lenght and width are defined according to site shape.

#### REFERENCE

ADAMS, R.McC.

1981 *Heartland of Cities. Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates*, The Oriental Institute, Chicago.

ADAMS, R.McC., NISSEN, H.J.

- 1972 *The Uruk Countryside. The Natural Setting of Urban Societies*, The Oriental Institute, Chicago.
- AL-DOORI, R., AL-QAISI, R., AL-SARRAF, S., AL-ZUBAIDI, A.A.
  - 2001-2002 The final report of Basmaia excavations (first season), *Sumer* 51, 58-72. (in Arabic)

AL-MUTAWALLI, N., SHALKHAM, A.U.

2014 From the Archive of "DI.KU<sub>5</sub>-mīsar." Excavation of Drehem (Ancient Puzriš-<sup>d</sup>Dagan), *Sumer* 59, 93-112.

AL-SHUKRI, S.J.

1974 Archaeological Survey in the Region of Afak Area, *Sumer* 30, 297-309. (in Arabic).

ANDRAE, W.

1903 Ausgrabungen in Fara und Abu Hatab, *Mitteilungen der Deutschen* Orient-Gesellschaft 17, 4-35.

DOUGHERTY, R.P.

1926 Searching for Ancient Remains in Lower 'Iraq: Report of an Archaeological Survey Made in Southern Babylonia during the First Quarter of 1926, *Annual of the American School of Oriental Research* 7, 1-93.

GIBSON, McG.

1977-1978 Nippur Regional Project: Umm al-Hafriyat, *The Oriental Institute* Annual Report 1977/78, 20-26.

MARCHETTI, N., EINWAG, B., AL-HUSSAINY, A., LEONI, E., LUGLIO, G., MARCHESI, G., OTTO, A., SCAZZOSI, G., VALERI, M. and ZAINA, F.

in press a QADIS. The 2016 Iraqi-Italian survey season in the south-eastern region of Qadisiyah, Sumer 63 (2017).

MARCHETTI, N., ABBAS, A., BELOGI, M., AL-HUSSAINY, A., JABBAR,

- B., LA'EBI, H., LEONI, E., LUGLIO, G., MARCHESI, G., SCAZZOSI, G., VALERI, M. and ZAINA, F.
  - *in press b* An Integrated Survey Methodology for Multi-layered Archaeological Landscapes. The 2016-2017 Survey Seasons of the QADIS project (Iraq), *Journal of Field Archaeology*.

#### WILSON, K.

*Bismaya. Recovering the Lost City of Adab* (Oriental Institute Publication 138), The Oriental Institute, Chicago.

#### Captions

Fig. 1 Map of the QADIS survey area. In red the newly identified sites between 2016 and 2017 by the Iraqi-Italian QADIS expedition.

Fig. 2 Chronological frequency of the newly identified sites between 2016 and 2017 by the Iraqi-Italian QADIS expedition.

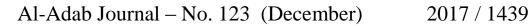
Fig. 3 QD009 Tell Gharnug. Structural evidence on the surface.

Fig. 4 QD005 Tell Meya'h. Note the main mound to the East to the east.

Fig. 5 QD052a Tell Algrna. Looting pits on the central mound.

Fig. 6 QD059 Qal'at Ashur, Ottoman period.

<sup>2012</sup> 



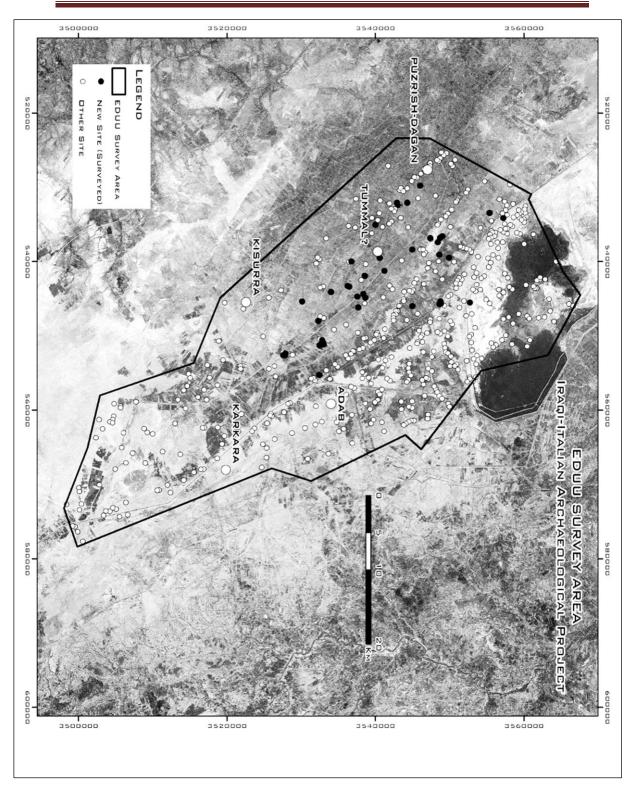


Fig. 1 Map of the QADIS survey area. In red the newly identified sites between 2016 and 2017 by the Iraqi-Italian QADIS expedition.

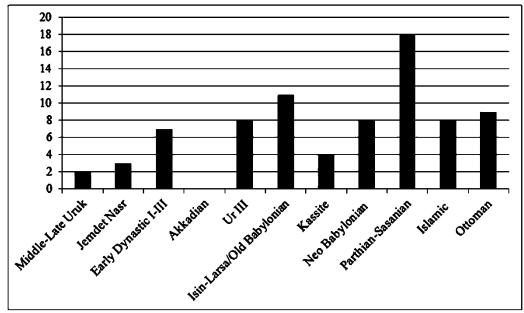


Fig. 2 Chronological frequency of the newly identified sites between 2016 and 2017 by the Iraqi-Italian QADIS expedition.



Fig. 3 QD009 Tell Gharnug. Structural evidence on the surface.



Fig. 4 QD005 Tell Meya'h. Note the main mound to the East to the east.



Fig. 5 QD052a Tell Algrna. Looting pits on the central mound.



Fig. 6 QD059 Qal'at Ashur, Ottoman period.

المدخل :

إن مشروع مسح قادس (QADIS) وهي مبادرة مقدمة من جامعة بولونا ألما ماتر ستيديروم مع الهيئة العامة للآثار والتراث . الموجودات المقدمة هنا قد تم تحليلها على إطار مشروع منظمة (EDUU) ((تعزيز التراث الثقافي والتعليمي من أجل التماسك الاجتماعي في العراق)). أن الموسوم الأول والثاني والثالث حدثت في شهر تشرين الأول من عام ٢٠١٦ وشهر كانون الثاني من عام ٢٠١٧ على التوالي ، وقد تم كتابة التقرير لجميع نشاطات المسح العامة لأول موسمين ، وقد تم تقديم معلومات مفصلة لحوالي أربعين موقعاً حددت مؤخراً ، بالاضافة إلى ما تم تثبيته من قبل مسوحات أدم عام ١٩٨١ ، ان منطقة المسح (شكل رقم ١) تتلو الحدود الادارية لمنطقة القادسية إلى الجنوب والشرق (بالضافة إلى جزء من حوض هور الدلمج) وقد توقفت حول مدينة عفج إلى جهة الشمال الغربي .