Revisiting Wied ir-Rum: Some recent archaeological discoveries

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The historical and archaeological potential of Wied ir-Rum was brought to the forefront in 1995 when a box-like room, having the technical idiosyncrasies of a late medieval church, was discovered by Prof. Alain Blondy at Simblija.² The structure was tentatively associated with the long-lost church of Santa Maria ta’ Callus, which was formally deconsecrated in 1636.³ On-going non-invasive fieldwork at Wied ir-Rum led to the detection of other archaeologically important features. The most significant of these is a meticulously cut rectangular-shaped subterranean chamber which this study tentatively associates with the church of San Ġakbu (St James), mentioned by Pietro Dusina in his 1575 visitation report. A reinterpretation of the archaeological significance of a subterranean, circular-shaped bath at Ta’ Baldu is also attempted. The bath was formerly tentatively dated to the Roman period,⁴ but new evidence makes the late medieval period a more probable option. Another cave in the Il-Qattara area has been tentatively associated with a subterranean centimolo for which no historical documentation survives.

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³ Ibid., xiv.

Pl. 1 A perched aquifer gallery in the San Ġakbu area at Wied ir-Rum.

Pl. 2 Interior view of the ‘Conti’ water gallery at Morgantina, Sicily.
Pl. 3 View of the south-western side of Wied ir-Rum as seen from the terrace area fronting Cave 3 at Ta’ San Ġakbu.

Pl. 4 Exterior view of badly damaged screening wall, partly enclosing access to Cave 1 at Ta’ San Ġakbu, Wied ir-Rum.
Pl. 5 Detail of the crosses carved into the innermost wall of Cave 1 at Ta’ San Ġakbu.

Pl. 6 A date carved into the north-east corner of Cave 3 seemingly reads ‘1890’.
Pl. 7 Interior view of Cave 1 showing several cross carvings and a large recessed niche giving access into a small rectangular shaped chamber.

Pl. 8 General view of the presumed San Ġakbu cave church interior.
Pl. 9 The presumed San Ġakbu cave church. Interior detail of the rock-hewn canal possibly devised in order to drain rain water seepage.

Pl. 10 The presumed San Ġakbu cave church. Detail of the cross carvings present in the interior west cave wall.
Geological and historical considerations

Wied ir-Rum in north-west Malta is a river valley carved out of an Upper Coralline Limestone outcrop due to rain water action (Fig. 1 & 2). Four subdivisions of Upper Coralline Limestone have been identified in the Maltese archipelago, but only two of these are visibly evident at Wied ir-Rum: the Tal-Pitkal Member and the Mtarfa Member.\(^5\) The Tal-

\(^5\) M. H. Pedley, Geological Map of the Maltese Islands, Sheet 1, Scale 1:25,000, resurveyed by M. H. Pedley, Malta: Oil Exploration Directorate, Office of the Prime Minister 1993.
Pitkal Member is a hard, compact deposit consisting of pale-grey coarse grained wackstones and packstones containing a diversity of fauna inclusions. Mtarfa Member is composed of friable carbonate mudstone and wackstones and can be cut with relative ease. Underlying Mtarfa Member is a Blue Clay deposit. Until the discovery of the mean-sea-level aquifer, Blue Clay was the most important of all Maltese geological deposits. It is because of the presence of a Blue Clay deposit, that a perched aquifer exists at Wied ir-Rum and its neighbouring regions.

Wied ir-Rum, together with the close-by Wied Hażrun is one of the most fertile districts of Malta, well known for its water sources and the quality of its cultivated crops. The valley is composed of a number of adjoining giardini. In 1647, G. F. Abela listed these as La Kattara, Tal Callus, Ta’ Scierf, Di Baldu and Di S. Giacomo (Fig. 3). Abela’s description of Wied ir-Rum – Valle de’ Christiani Greci, amena, e piena di giardini d’ambe le parti, che rappresentano all’occhio una bellissima veduta, e somministrano al gusto buonissime frutta, and its environs, gives the impression of a series of long established orchards, dependent on reliable water sources. Another glimpse of several of the Wied ir-Rum settlements can be gleaned from a detailed plan of the Mtaħleb area drawn up in 1665. The plan’s primary focus is on the giardini of the Mtaħleb district, but does indicate the

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6 Ibid.
7 Ibid.
8 Ibid.
9 It was only from 1856 onwards, that attempts to tap a mean-sea-level water source were made. See T. O. Morris, The Water Supply Resources of Malta, Malta: Government of Malta 1952, 4.
10 Possible modern equivalents to giardino (pl. giardini) include orchards, plantation, garden, market gardens and even possibly small-holdings. For the purposes of this study, any reference to giardino or giardini type properties will be given in its original form.
11 G. F. Abela, Della Descrittione di Malta isola nel mare siciliano con le sue antichità, ed altre notizie, Malta 1647, 65. The modern equivalents of these toponyms are Il-Qattara; Simblija; Tax-Xierf; Ta’ Baldu; and Ta’ San Gakbu.
12 Abela describes Wied ir-Rum as, “The valley of the Greek Christians which abounds with horticultural gardens and which presents the visitor with a beautiful view and good tasting fruit”. See Abela, 1647, 65.
13 AIM Acta Civilia vol. 171, Case 12.
14 These are namely Giardino ta’ Haleun, Giardino Grande and Giardino ta’ Gebel Abiat. It is through this plan that a water gallery in the Giardino Grande area, the name of which was formerly unknown, can now be securely associated with the Aayn il Kibira or Fontana Grande mentioned by Abela. See Abela, 1647, 66.
location of the Giardino di Ain Teites, Giardino di San Giacomo, Giardino ta Baldu and Giardino e Terre tal Qattara.

![Pl. 11 Detail of the 1565 Map of Malta by Nicolo Nelli probably showing Wied ir-Rum (after Ganado & Aguis-Vadala 1994, 29).]

The importance of Wied ir-Rum and the probability that this contained an extant framework of giardini prior to the seventeenth century is strongly hinted at by the 1551 and 1565 maps of Malta by Antonio Lafreri and Nicolo Nelli respectively (Pl. 11). The maps illustrate what appears to be a watercourse passing through the valley bed and trees flanking the southern valley side. In both cartographic representations it is significant that the spatial location of the only marked valley, captioned Vallone giardini (valley orchards), corresponds with that of Wied ir-Rum. Even though not mentioned by name, the valley’s relief and its location on the western coast of Malta between the settlement of Tartarni and Mgarr, leaves little doubt as to its identity. The same applies to another map, also dating to 1565 and which was possibly produced by Tommaso Barlacchi. Following a close scrutiny of this map, it is pretty much evident that from all the valleys in the western region of Malta, only a

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16 A. Ganado & M. Agius-Vadala, A study in depth of 143 maps representing the Great Siege of Malta 1565, Malta: PEG 1994, 29.
valley the spatial location of which corresponds with the Wied ir-Rum valley system is illustrated in a clear and well-defined manner (Pl. 12).  

Valle de’ Christiani Greci, amena, e piena di giardini d’ambe le parti, che rappresentano all’occhio una bellissima veduta, e somministrano al gusto buonissime frutta.

Fig. 2 Contour map showing the Wied ir-Rum and Wied Hażrun valley systems.

Apart from its high landscape value, rich biological diversity and agricultural significance, Wied ir-Rum and the adjoining Wied Hażrun rank amongst the few essentially unspoiled Maltese archaeological landscapes. If key areas of both valleys were to be scientifically excavated, these may present the medieval archaeologist with much needed data on Malta’s rural medieval past, including landscape development. A non-invasive archaeological investigation held here between 1998 and 2003 resulted in the identification of a number of man-made caves and rock-

17 Ibid. 40. Research on this matter is still a work in progress. One possibility is that being a major agricultural production site, containing a series of well-developed perched aquifer water extraction systems, might have warranted Wied ir-Rum’s inclusion on this map.  
18 Abela describes Wied ir-Rum as, “The valley of the Greek Christians which abounds with horticultural gardens and which presents the visitor with a beautiful view and good tasting fruit”. See Abela, 65.
cut water galleries. These subterranean features are difficult to date with certainty, but based on the landscape context within which they are located, it is likely that these belong to the late medieval and/or the early modern periods. Cave usage at Wied ir-Rum varied from sacred spaces, human habitation, animal pens, agricultural storage and animal driven mills – *centimoli*.

![Fig. 3 Settlement locations at Wied ir-Rum.](image)

19 K. Buhagiar, Medieval and Early Modern Cave-Settlements and Water Galleries in North-West Malta South of the Great Fault: Field Survey and Gazetteer, unpublished M. A. thesis, Malta: University of Malta 2003 A. Research connected to my doctoral thesis is currently underway in order to attempt to more accurately date these subterranean hydraulic features.

20 Dating of the local troglodytic remains is hindered by the fact that a substantial number of caves may have been abandoned as late as the first half of the twentieth century. This continued cave utilisation would have resulted in major disturbance of the older phases of occupation. Furthermore, it is likely that many cave-units only preserve shallow unstratified deposits on their interior. On the other hand, the Maltese troglodytic phenomenon and landscape evolution appears to have close parallels with neighbouring Sicily and particular areas of South Italy. See K. Buhagiar, “Caves in Context: the late medieval Maltese scenario”, *Caves in Context: The Cultural Significance of Caves and Rock shelters in Europe*, K. A. Bergsvik & R. Skeates (eds.), Exeter 2012, 153-65, esp. 164. See also K. Buhagiar, “Malta, An Island Satellite in the Lee of Sicily: Investigating the Troglodytic Context for the Late-Medieval and the Early-Modern periods”, in *L’Insieme Rupestre di Monte S. Antonio A Regalbuto – Alle origini del Rahal di ’Abbūd*, I. Contino & F. Buscemi (eds.), Caltanissetta 2012, 95-117.
The life source of both Wied ir-Rum and Wied Ħażrun consists of a series of rock-cut galleries which collect water from the perched aquifer (Fig. 4). Subterranean galleries are hewn into the brittle Mtarfa Member deposit which overlies the Blue Clay deposit, and tunnel into the valley sides in order to tap into the perched aquifer (Pl. 1). The volume of water collected varies from gallery to gallery but most galleries still have a perennial water supply, sufficient to allow crop cultivation during the arid summer months. Water transportation within galleries is often facilitated by means of a shallow canal cut into the gallery floor.21

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21 For more extensive documentation on the water gallery systems of north and north-west Malta see K. Buhagiar, “Water Management Strategies and the Cave Dwelling Phenomenon in Late-Medieval Malta”, *Medieval Archaeology*, vol. 51, Malta 2007.
The earliest known documented evidence for the presence of perched aquifer galleries at Wied ir-Rum dates to between 1621 and 1654 when there is the mention of water springs at Simblija and the Tal-Callus estate. The entry documenting the hydrological resources of Tal-Callus reads:

“[… ] in detto Giardino vi sono due fontane, la grande sotto il balzo dalla parte di mezzo giorno, dove è la sua gebia per
dentro la rocca, l'altra dalla parte di ponente, dove vi è ancora la gebietta”. 22

In the case of the former water source at Tal-Callus, reference to the subterranean reservoir in which spring water accumulated, points towards the existence of a water gallery, the output of which was stored in an subterranean reservoir in front of the gallery entrance. 23 As a matter of fact, the presence of a manually excavated subterranean water retrieval feature is clearly indicated on an early eighteenth century plan of the Tal-Callus property. 24 The existence of a perched aquifer gallery in the Tal-Callus estate well before the early modern period is implied by the mention of a fonte aquarum called Il-Fawwara ta’ Wied ir-Rum in a notarial deed dating to September 1467. 25

A total of twenty-four water galleries have been recorded at Wied ir-Rum so far, the majority of which are fronted by an underground, rock-cut water reservoir. Subterranean reservoirs were probably resorted to in order to reduce water evaporation during the warm and dry season. Water stored in subterranean environments also retains a lower temperature, which in turn discourages algal growth and bacterial contamination.

Water gallery distribution is not only limited to Wied ir-Rum. Galleries are located in other areas of Malta and Gozo which possess the same geological stratification. 26 Nonetheless, it is significant to note that

22 NLM, Treas. B. 289, f. 84 and Treas. B. 74, f. 136. The Ta’ Callus estate was formerly tentatively identified with the Simblija tenement, located at the point of intersection of the Wied ir-Rum and the WiedĦażrun valleys. See P. Saliba, J. Magro Conti & C. Borg, A Study of Landscape and Irrigation Systems at Is-Simblija Imiżi ta’ Dingli, Malta, Aramis Monograph Series vol. 3, Malta 2002, 17-20. Recent archival and field research has enabled the author to accurately associate the Tal-Callus estate with a sizeable parcel of land located to the west of Il-Qattara, at map reference 4250 7000. Basing himself on notarial documentation, Prof. Stanley Fiorini has also reached similar conclusions. See S. Fiorini, “X’nafu dwar Callus?” in Min kien Callus?, G. Wettinger, S. Fiorini, C. Cassar & Y. Vella (eds.), 15-53, Malta: Klabb Kotba Maltin 2003, esp. 23-6.

23 The plan for the Il-Qattara gallery, also at Wied ir-Rum, gives an idea of such an arrangement. See K. Buhagiar 2007, 121.

24 NLM. Treas. B. 291, ff. 86–7. It is significant that a masonry-built structure is marked on this plan by means of a cross-symbol coloured red. This may indicate the location of the small way-side church, known to have existed within the Tal-Callus estate and which was dedicated to either St Nicholas or Santa Marija. Field investigation has shown the presumed church structure to survive in part, but this is the focus of on-going research and a future publication.


26 K. Buhagiar 2007, 119-21. Elsewhere in Malta, water galleries frequently adjoin cave-dwelling sites which are likewise excavated into a brittle Mtarfa Member deposit.
the largest perched aquifer water gallery concentration detected in the Maltese archipelago to date, is found at Wied ir-Rum (Fig. 4). Galleries are generally easily identifiable from their rectangular-shaped rock-cut entrance that is on average 0.8 m wide and a little more than 1.5 m high. Average gallery length is unknown, but several of the recorded water tunnels may well be several hundred metres deep. Most galleries provide the surrounding area with a perennial water source, though the volume of water extracted varies from one gallery to another. Galleries are generally level with the highest terraced fields in a valley, with water being gravity-fed to any adjoining and/or underlying fields by means of open stone channels.

It is not uncommon for a gallery to fork into one or more arteries. Some galleries just extract a small water trickle from the perched aquifer. The water level in others is simply too deep to wade through, making their investigation a hazardous ordeal. The accurate mapping of flooded galleries has only been possible since 2008, by the employment of an experimental, remotely operated submersible camera (ROV). This is equipped with video and sonar sensors, digital compass, robotic arm and a Global Positioning System (GPS) locator and produces video footage and sonar scans of the galleries.

The dating of Maltese galleries is a task which requires caution. At Ta’ Baldu, situated in the upper valley section of Wied ir-Rum (map reference 4329 6993), a carved inscription rendered in cocciopesto records the date ‘1629’. This probably commemorates the occasion when a large subterranean reservoir was constructed and major changes were made to an already extant perched aquifer water tapping system (Fig. 5). An adjoining gallery (Fig. 5; A), which originally fed the Ta’ Baldu cave with water, appears to be of an earlier date. The mention of giardini in a 1551 map of Malta by Lafreri is also significant. Systematic field research

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27 Ibid. 119.
in north and north-west Malta and parts of Gozo, was successful in demonstrating how in most instances, giardini obtained their perennial water source from subterranean galleries. On-going research indicates that in areas of Malta and Gozo possessing Upper Coralline Limestone and Blue Clay deposits, water galleries formed an integral part of the giardino framework. Furthermore, it is likely that perched aquifer galleries already featured in the pre-Knights’ Maltese landscape. The first known reference to a giardino in Malta is at Gomerino in the territory of Rabat (Malta), and dates back to 1317.\(^{32}\) It is also significant that at Ghajn Qajjied, Ghajn Stas and Ghajn Ħammiem, first mentioned in 1361, 1372 and 1436 respectively, the water sources giving life to these areas originate from within water galleries.\(^{33}\) Dating to 1372–3 is a mention of fons Ginen Rumen (fountain/spring at Ġnien ir-Rummien), at Gozo.\(^{34}\)

Furthermore, Maltese galleries bear a resemblance to the Qanat-type water extraction systems which may have been introduced into Malta from neighbouring Sicily during the late medieval period.\(^{35}\) Of the Sicilian galleries, the Palermitan ones are the best documented. Ceramic fragments recovered from within a secure archaeological context in a qanat system at Villa Raffo (Palermo), are dated to the twelfth or thirteenth centuries.\(^{36}\) Field trips to Sicily carried out by the author have resulted in the identification of other galleries at the Castello di Lombardia at Enna, as well as S. Lucia di Mendola and Ferla, both in the territory of Syracuse, and Morgantina\(^ {37}\) in the territory of Catania (Pl. 2). More extensive investigation of these water systems is necessary, but their context is seemingly representative of the medieval period.

Elements making up a real qanat system consist in the excavation of an almost horizontal gallery responsible for extracting water from a perennial source and a series of vertical shafts piercing the gallery roof.\(^ {38}\)


\(^{33}\) G. Wettinger, Place–Names of the Maltese Islands c.1300–1800, Malta: P.E.G. Ltd. 2000, 184, 188, 190.

\(^{34}\) Bresc 1975, 130.

\(^{35}\) K. Buhagiar 2007, 118–22.


\(^{37}\) The existence of water galleries at Morgantina was brought to the author’s attention by Dr Sandra Lucore of the American School at Athens. See also D. Crouch, Geology and Settlement: Greco–Roman patterns, Oxford: Oxford University Press 2004, 57.

Shafts were of key importance in qanat excavation. It was by the excavation of a principal shaft, more commonly referred to as a ‘mother well’, that the presence of water was first detected. In the post qanat excavation phase, shafts allowed easy access to areas of the gallery system needing maintenance. It is probable that not all Maltese and Sicilian galleries are ‘true’ qanat. The emerging picture suggests that whilst galleries in Malta tunneled below urban settlements frequently contain shafts, many rural galleries do not. Known exceptions to the latter instance are the water galleries at Gomerino and possibly Lunzjata, both in the territory of Rabat (Malta), Tas-Santi in the territory of Mġarr (Malta), and Ghajn Żnuber in the territory of Mellieha. One or more shafts may be present at the water gallery of Aayn il Kibira, the life source of Giardino Grande, at Mtahleb. In a 1656 plan of the area, the garigue land overlying the gallery is marked as Xara ta li Ispera, meaning ‘the garigue of the well’.

A subterranean bath at Ta’ Baldu

The Ta’ Baldu tenement is located within the upper section of the Wied ir-Rum valley bed, almost at the point of intersection with Wied Ħażrun (Fig. 3). The existence of a subterranean bath at Ta’ Baldu (map reference 4330 6988) was first brought to the attention of A. A. Caruana in 1869. Caruana subsequently included a description of it in his Phoenician and Roman Antiquities in the Group of Islands of Malta, published in 1882. The bath consists of a small, circular, rock-cut chamber accessed by four rock-cut steps (Fig. 6). It was rediscovered during the field survey of the Ta’

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39 The Mdina/Rabat settlements in Malta and the Palermo settlement in Sicily are such instances.
40 Morris 1952, Sheet 17.
41 AIM Acta Civilia vol. 171, Case 12.
42 Caruana’s account of the remains is as follows: “I visited, on the 20th June last, one of these Roman baths, the property of Mr Giorgio de’ Conti Sant Fournier, in the rustic tenement of Ta’ Baldu, about one mile from the Casal Dingli. It was discovered in 1869, and is pretty well preserved. A circular room, excavated and vaulted in the rock plastered all over, about 44 ft. in circumference, with stone seats all round, forms the bath. There was a constant supply of water from a spring in the same tenement. Lead pipes conducted under-ground from a small tank, high up under the vault, on the right-hand side, fed with a water fountain in the centre of the room. Some remains of the basin, together with its support are still preserved. Below three or four steps at the entrance, there is another tank, 1 ft. 40 in. long by 1 ft. wide, with three holes furnished with lead pipes to carry the overflowing water into a large tank outside the bath.” See A. A. Caruana, Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta, Malta: Government Printing Office 1882, 93.
Baldu area in 1999, hidden behind thick ivy growth. The bath’s interior is fairly well preserved, and consists of rock-walls which are completely plastered over by means of a cocciopesto-type of grey-coloured mortar, and a circular bench running along the chamber perimeter (Fig. 6, B). A nearby perched aquifer gallery fed the bath from a perennial water source. The gallery was linked to the bath system by means of a small rectangular-shaped water tank (Fig. 6, C). From this tank, water was gravity-fed through terracotta or lead pipes, to a fountain which acted as a centre piece to the bath arrangement.

The fountain, which is described by Caruana as having been located in the centre of this subterranean chamber, was found to be in an unfortunate state of disrepair. Scale drawings of the fountain’s few surviving masonry fragments were penned and archived at the University of Malta’s Department of Classics and Archaeology. The fountain appears to have been deliberately destroyed by one of the former land owners in the 1950s, whilst searching for lead and buried treasure. Until the early 1980s, access to the bath was restricted by means of an iron gate, the removal of which probably resulted in the substantial disfigurement

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44 The drawings were completed with the help of Dr Nicholas Vella and Ms Maria Elena Zammit.
45 Information was passed on to the author by one of the former land owners.
46 This information was given to the author by one of the former land owners.
of the exterior bath access point. Cut into the floor of the bath’s interior adjacent to the access doorway, is a shallow rectangular-shaped shaft (Fig. 6, E). This contains three terracotta pipes still \textit{in situ}, the function of which was to drain the surplus water elsewhere. Water level within the bath was probably controlled by regulating the water flow through the pipes at this point. There is no evidence for water heating at Ta‘ Baldu.

![Fig. 6 Circular-shaped bath at Ta’ Baldu, Wied ir-Rum.](image)

The bath is, to author’s knowledge, typologically unique to Malta and cannot be compared to other local examples. Its interior is devoid of archaeologically-relevant deposits, but future scientific subsurface investigation of the fronting and adjoining fields, will hopefully give a better indication as to the bath’s approximate date. A. A. Caruana was probably deceived by the apparent presence of an olive pipper in the close-by Ghar ta’ Baldu when he dated it to the Roman period.\textsuperscript{47} Likewise, when publishing a brief report announcing the bath’s re-discovery in 2000, this was once again tentatively associated with a Roman period relic.\textsuperscript{48} On the other hand, based on formerly unavailable documentary evidence, a reinterpretation of the remains suggests that a late medieval or early modern date are more probable. The bath is typologically similar to other rock-cut subterranean chambers in Palermo, Sicily, known as

\textsuperscript{47} Caruana 1882, 93

\textsuperscript{48} K. Buhagiar 2000, 50.
Camere di Scirocco. The earliest documentary evidence for such chambers at Palermo comes from Palazzo Marchesi, and dates to the late fifteenth century.

Camere di Scirocco are in essence rectangular or circular shaped rock-cut chambers, the water supply of which is obtained by means of an underground spring or an adjoining subterranean water gallery. Their underground location, the flow of water and the presence of an aeration shaft, created a pleasant and refreshing microclimate during the warmer months of the year. Camere di Scirocco became fashionable amongst upper class Palermo residents during the course of the seventeenth and eighteenth centuries, and were probably inspired by earlier medieval period chambers for which only indirect and limited evidence survives. The principal difference between the Ta’ Baldu bath and the Palermitan cooling chambers is the absence of an aeration shaft in the former.

The rural landscape context within which the Ta’ Baldu bath is located is probably late medieval. More accurate dating might be established through the scientific analysis of mortar lining the bath interior. The reliability of mortar dating has been successfully tested on securely dated Punic period cisterns at Pantelleria.

A centimolo at Il-Qattara

The horticultural garden of Il-Qattara is described by Abela as,

“Giardino La Kattara – nome originario dal gocciolare, essandui una grotta, la cui parte superior, continuamente distillando, forma un riuolo d’aqua, che inaffia il giardino.”

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49 The existence of Camere di Scirocco was brought to my attention by Dr Nicholas Vella of the Department of Classics and Archaeology at the University of Malta. Scirocco is the hot dry wind that originates in the Sahara region and blows across the Mediterranean Sea into Southern Europe.


51 Todaro 2002, 80–1.

52 Todaro 1989, 122.

53 Data obtained for the ‘International Conference on Ancient and Modern Water Storage’ organised at Pantelleria by the University of Tübingen, 11–14 May 2011.

54 Abela 1647, 65.
Il-Qattara is located on the southern flank of Wied ir-Rum, in between Tax-Xieref and Simblija (map reference 4262 6991). Five manually excavated caves and three water galleries are present in this area, the most striking of which has a circular plan and is accessed through a narrow rock-cut doorway (Fig. 7). A north-facing dry-stone wall completely screens what may have formerly been another access point into the cave. The screening wall also contains evidence of a walled-up window (Fig. 7, F). As the screening wall is built at a distance of nearly two metres from the overhanging cave ceiling, the resultant gap is bridged over by means of a light roof structure, supported by rudely cut timber beams. It was not uncommon for caves conforming to this roofing typology to be partly covered by a wooden ceiling, and similar roofing strategies were noted elsewhere in north and north-west Malta. This roofing method was commonly resorted to in order to obtain a larger internal space and perhaps better ventilate the cave interior.

The cave’s rectangular recesses (Fig. 7, C & D), were probably utilised as feeding troughs. During the past decades the cave was used for manure storage, but its circular form, the over-all higher degree of interior refinement, and a meticulously cut recess in the cave roof (Fig. 7, E), are indicative of the cave’s original use as a centimolo (an animal-driven mill). Sections of the cave-walls also preserve traces of a mortar rendering. Considering that windmill technology was only introduced in Malta by the Knights of St John after 1530, during the high and late medieval period, the only corn grinding machinery available on the island was the centimolo. In the case of the Il-Qattara centimolo, the adjoining interconnected cave was possibly the pen where the beast(s) of burden turning the corn grinding machinery was housed.

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55 K. Buhagiar 2003, 183.
56 K. Buhagiar 2007, 114.
57 It is unlikely that this cave’s timber roofing predates the first decades of the twentieth century, but the materials utilized and the construction methods employed are probably similar to the late–medieval roofing methods recorded by Quintin in the 1530s. See Quintin 1536, 31; K. Buhagiar 2007, 112–4.
The Ta‘ San Ġakbu area

Another section of Wied ir-Rum which merits attention is a stretch of arable land bordering the northern valley side between Għar Żerriegħa and San Ġakbu. The area is characterised by challenging relief, mainly caused by the slope gradient and the detachment of large Upper Coralline boulders from the adjoining cliff face. Future field surveys in this section of Wied ir-Rum may be hindered by the maquis-type scrubland vegetation, which thrives in the uncultivated upper terraced sections of the valley. The Għar Żerriegħa and San Ġakbu districts are dotted with manually excavated caves, formerly in use as either dwellings or rural agricultural installations. Several of these had to be omitted from the field survey, either because access to their interior was denied, or due to the inaccessibility of the area. The steep slopes that lead up to the caves are unstable and some are in imminent danger of collapse.

Of particular interest is an irregular shaped terrace (map reference 4253 7040) giving access to three separate caves and an underlying water gallery. The terrace is linked to the Ta‘ San Ġakbu plateau by means of a badly weathered footpath (Fig. 8; Pl. 13). Both terrace and gallery are linked together by a series of rock-cut steps. The underlying agricultural

Fig. 7 A probable centimolo at Il-Qattara
(surveyed by Anthony Buhagiar & the author)

59 K. Buhagiar 2003, 155–164.
land can be accessed by foot paths, which lead from the water gallery exterior to different areas of the valley.

The water gallery supplies the area with a perennial water source and, like similar water retrieval systems elsewhere in north and north-west Malta, was dug into an Mtarfa Member rock deposit. Access into the gallery (Pl. 1), is down eight steps and there is a roughly rectangular-shaped subterranean water reservoir in front of it (Fig. 9, ‘C’). The gallery’s entrance is partly enclosed by two or three courses of ashlar masonry slabs – apparently a previous attempt at raising the water level within it. The current gallery arrangement consists of a canal hewn into the rock-wall, which conveys the water extracted by the gallery into a basin ‘B’, which also functions as a sump in order to rid the water of suspended particles. From here, water is channelled into a reservoir ‘C’ and in turn is gravity fed to the underlying terraced fields by means of a partly subterranean masonry canal ‘E’. Tool markings preserved in the ceiling of the reservoir clearly indicate that this was a later addition, the excavation of which destroyed the outermost section of the water gallery.

![Fig. 8 Location plan of the San Ġakbu area showing the main point of access to the presumed San Ġakbu cave church.](image)

The overlying terrace area is delineated at its western-most extent by massive detached Upper Coralline Limestone boulders. The terrace’s surface was levelled off by means of a mixture of soil and stone chippings and its main function is that of connecting a series of three caves together. Both terrace and caves are located at a higher contour level than the underlying water gallery and fields and command imposing views of
the south-western side of the Wied ir-Rum and the Miğra l-Ferha area (Pl. 3). All three caves are located within a Tal-Pitkal Member and Mtarfa Member rock outcrop.

The footpath, which leads from the Ta’ San Ġakbu plateau down to the terrace, first gives access to a small apse-shaped cave which measures some 6.9 by 3 m (Pl. 4). This is located at the easternmost extremity of the terrace and with the exception of a narrow doorway, the cave’s mouth is totally screened off by a badly damaged dry-stone wall. Being dug into the brittle Mtarfa Member deposit, the cave’s low ceiling and sections of its interior walls are badly weathered, primarily due to wind erosion. Notwithstanding this, the north cave wall still retains a series of cross shaped carvings, the most prominent of which is a Greek cross measuring 25 by 27 cm. The other cross carvings consist of a cross pedestal and what appears to be a St Peter’s cross (Pl. 5). A number of lamp holes and niches are also hewn in this area of the cave.

![Fig. 9 Subterranean water gallery and fronting water reservoir at Ta’ San Ġakbu.](image-url)

Carved into the far north-east corner of the inner cave wall is a badly weathered date which seems to read 1890 (Pl. 10). The ‘18’ and ‘90’ are separated one from the other by another apparent Greek cross carving, of which only the upper forked finials survive. A closer look at this graffito gives the impression of a different hand at work. The date carvings are shallower and much less defined than the previously described cross monograms.
In the northwest wall of this cave is an apse-shaped recess into which a small rectangular-shaped chamber measuring 1.64 by 3.19 m was excavated (Pl. 7). While the niche recess appears to be coeval with the rest of the cave, tool markings preserved in this chamber’s walls and ceiling, are distinctly different. It is probable that this chamber did not form part of the cave’s original arrangement and was excavated subsequently. The rock cut ledge flanking the chamber’s left hand door jamb might have been possibly used as a dukkiena – a rock cut or masonry built bench commonly found within a late medieval domestic or ecclesiastical space. Establishing this cave’s significance is a complex task, but the cross monograms and other carvings noted within, appear to indicate a connection with Cave 3, described hereunder.

Midway between caves 1 and 3 is a large rock boulder which partly screens the entrance to another cave (Cave 2; Fig. 10). This subterranean space has unrefined walls and an irregular internal layout. Its western wall is completely bare and devoid of architectural elements. On the other hand troughs, niches and other storage recesses are neatly cut along the eastern cave wall. Preserved within are different sets of tool markings, which suggest that the present cave is the result of an organic type of development.

What appears to be the most important cave of the series is located in the western most extent of the rock terrace (Cave 3; Fig. 11) and directly overlies the water gallery. Cave 3 is fronted by a clearly defined
rectangular-shaped terrace of fair proportions and was possibly conceived to function as a communal gathering spot. Another cross carving is present in a prominent part of this area. The cave’s entrance is partly screened off by a dry-stone wall and the interior has an almost square plan (Pl. 8). The cave’s floor is c.40 cm lower than that of the outside terrace. The cave’s interior measures 8.05 by 6.11 m and has an approximate ceiling height of 3.86 m. Four animal feeding troughs (Fig. 11; A), flank the west and east walls of the cave and there are also two niches or storage recesses (marked ‘B’). Tethering holes are mainly present in areas adjoining the feeding troughs, although another tethering hole pierces the ceiling area (Fig. 11; C). Other small recesses in this area probably functioned as lamp holders.

Well-defined natural vertical joints are clearly visible in the Tal-Pitkal and Mtarfa Member deposits within which the cave is excavated, and these encourage the seepage of rain water. This accounts for the relatively damp interior, which most seriously affects the north wall of the cave. This undesirable water seepage probably led to the excavation of a canal above recesses ‘B’ and marks an attempt at diverting the seeping water away from the cave floor (Pl. 9). Dampness within the cave encourages the growth of a viscous black coloured type of mould which typically thrives in such humid environments and covers significant sections of the interior. An inspection of the cave walls did not reveal the presence of
any whitewashing or mortar rendering. Stone chippings and fine loose earth cover the entire interior floor section.

The cave’s degree of architectural sophistication and the neat layout are noteworthy, especially when considering that a sizeable portion of the cave, including the ceiling area, is shaped out of the hard Tal-Pitkal Member deposit. This cave is among the most refined subterranean structures recorded within Wied ir-Rum by the author.

Establishing an approximate date and use for this cave is a challenging task. Well defined tool marks preserved in the wall and roof sections suggest that the layout is the result of piecemeal development. This cave is finely carved and particularly intriguing are a series of cross monograms carved into its west wall and ceiling. Clearly identifiable at ‘C’ (Fig. 11), are two Latin crosses and another cross containing crossbars at the end of each of its arms. Several of the lamp niches clearly postdate the cross carvings. The right flank of the middle cross, and a section of the bottom crossbar of the right hand cross (Pl. 10) are destroyed by lamp holes. In the ceiling, alongside wall niche ‘B’ are another two well-defined carved Latin crosses. It is unlikely that feeding troughs ‘A’ (Fig. 11) formed part of the original cave layout. Tool marks preserved within these recesses are distinctly different from the finer markings preserved throughout the remainder of the cave interior.

The cave refinement, location and general setting makes it tempting to suggest that this subterranean space is the long lost church dedicated to St James (San Ġakbu), known to have existed at Wied ir-Rum. Knowledge of this church’s existence was preserved for posterity in the 1575 visitation report by Pietro Dusina, who described the Church of St James as follows:

“Also visited the Church dedicated to Saint James the Apostle, which is rural, and built in the place named Guedrum, which is without revenue, rector, [paved] floor, door, ornaments, but

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60 The fact that the ceiling exhibits the same degree of refinement as the cave walls is significant. The author’s experience has indicated to him how within manually excavated caves, cave ceilings are generally the least refined areas within such subterranean spaces.

61 This can be tentatively identified with a cross potent.

62 Another mention of the church of St James at Wied ir–Rum can be found in NLM Treas. B. 289, f. 84. A transliteration of the relevant section reads: [...] cofina con il detto uicolo che uiene dal detto Casal dingli et dalla chiesa di san Giacomo, quale da entrata all’istesso giardino di gued irro, et alle terre del detto Marco Cassar [...] The cave which this study tentatively associates with the church of St James is actually located close to the country lane giving access to the San Ġakbu giardino at Wied ir–Rum.
where, because of devotion, the owners of the neighbouring orchards celebrated mass within, on the feast day of St James; from the upper part, flows down rain. The lord [Bishop] said he would not authorise further celebrations in the Church, until the wooden doors, the floor and the roof were restored."

A recent publication has tentatively associated a partly excavated and partly masonry built space at the neighbouring Għar Żerriegħa settlement with the San Ġakbu Church. Whilst this may be so, the study did not take into account the fact that typologically identical spaces are frequently found adjoining the main access point(s) to rural troglodytic settlements in north and north-west Malta. These were either used as a storage depot for a horse drawn cart, or for agricultural produce. The arched niche carved into the innermost wall has no distinct features which associate it with the altar area of a former place of worship. The ceiling area and the masonry lining the upper wall sections are of a modern date, highlighting the degree of interference that this partly rock-cut room has undergone. Furthermore, a brief mid-seventeenth description, which sheds some light on the whereabouts of the church of St James at Wied ir-Rum, makes it improbable that this was located at Għar Żerriegħa, from which the main access route into the San Ġakbu area of the valley is not visible.

Furthermore, toponomastic evidence makes it probable that the San Ġakbu Church was located within the area known as Ta’ San Ġakbu in GħarŻerriegħa. 

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65 Similarly sized partly rock-excavated, partly masonry-built chambers were observed amongst others at Tas–Santi in the territory of Bahrija and at Tal–Merħla in the territory of Mtahleb. Both were located at the main point of access to these settlements. See K. Buhagiar 2003, 135; K. Buhagiar, ‘Bahrija – Its Archaeological Significance’, Melita Historica, vol. XIV no. 4, (2007), 357-74.

66 Blondy 2010, 11.

67 Ibid.

68 NLM Treas. B. 289, f. 84. See also footnote 59.
Wied ir-Rum, thereby giving the district its name. It is not uncommon for an important landmark to lend its name to a locality. A case in point is the cave church of San Niklaw (St Nicholas) at Mellieha, located within a valley bearing the same name.\(^{69}\) The same applies to the Ta’ San Pietru cave church, in the territory of Naxxar.\(^{70}\) The area known as Misraħ Għar il-Kbir in the territory of Siġġiewi implies that the main landmark in this area, which borders the south-western perimeter of Buskett, was the Għar il-Kbir troglodytic settlement.\(^{71}\)

The importance of the cave, which this study proposes to be the San Ġakbu church visited by Dusina in 1575, is also hinted at by the presence of an underlying water gallery. Typologically, this arrangement is identical to the cave church of St Leonard at Lunzjata in the territory of Rabat (Malta), where an excavated subterranean cultic space, also directly overlies a water gallery. The Lunzjata gallery was partly investigated using a remotely operated submersible in March 2009 and was found to be over 90m long and possibly to contain a series of circular shafts piercing the gallery’s ceiling.\(^{72}\)

One of Dusina’s primary concerns with the San Ġakbu church was rain water seepage into the interior. The previously described near-horizontal canal in the cave’s north wall can perhaps be associated with efforts in trying to prevent rain water seepage from flooding the cave’s interior. The cave lacks any paving and no traces survive of the masonry or wooden altar which may have adorned it.

Dusina refers to the countryside church of St James as being built in the place called Guedrum. Fieldwork at Wied ir-Rum has demonstrated that a strong troglodytic tradition prevails in this region. Taking the San Ġakbu settlement as a case in point, the site’s setting and surviving evidence strongly indicate that the late medieval and early modern settlement was probably troglodytic in nature, and consisted of a series of caves excavated into an Mtarfa Member deposit. Masonry built accretions would have consisted of dry stone walls screening the access to the caves. There were instances, however, when caves were extended and this extension was partly roofed over by masonry. This method of roofing


\(^{71}\) K. Buhagiar 2003, 247-62.

\(^{72}\) For information on the *Malta Cistern Exploration Project* refer to: http://users.csc.calpoly.edu/~cmclark/MaltaMapping/
was resorted to when the cave screen-wall was built around 0.6 m in front of the overhanging rock-ledge, thus permitting the intermediate gap to be bridged over by means of thin ashlar slabs. A section of the Lunzjata cave church in the Rabat (Malta) territory is roofed in this manner.

Rural rock-cut churches were a common feature in the late medieval Maltese landscape. Mainly located in north-west and north Malta, the location of these troglodytic churches was primarily dictated by the topography and regional geological stratification. Cave church diffusion is perhaps best illustrated by the fact that the principal troglodytic church of Mellieha had the status of a parish-church in the fifteenth century, and served the spiritual needs of nearby cliff-face settlements. Rural cave churches were rather small, had a dimly lit interior and were frequently accessed from the rock-terrace which connected two or more cave settlement units. The entrance to cave churches was usually enclosed by a dry-stone wall, within which a narrow square-headed doorway provided the only means of access to the interior.

Rural churches were probably furnished with either masonry or wooden altars and, in the instance of the cave church of St Leonard in the territory of Rabat (Malta), and that dedicated to St Peter at Naxxar, there is evidence of a flagstone floor in the interior, or a cobbled passageway facilitating access to the often difficult-to-reach entrance. In a number of instances, rock cut or masonry built dukkien-type benches also perimitered the interior church walls. Several of the surviving churches were decorated by murals, which currently survive in a precarious state of preservation. The surviving murals speak a common iconographic language and are Siculo-Byzantinesque in tradition and inspiration, but none were detected in the cave this study purports to be the church of St James.

The emerging scenario at Wied ir-Rum, based on the available archaeological, historical and toponomastic evidence indicates that present day settlement within the valley owes its origin to late medieval agricultural intensification efforts. The landscape transformation which

73 Refer to: http://kasa.officinastudimedievali.it/cd/risorse/Libro/Malta_and_Sicily.pdf. See Chapter 3 on the ‘St Leonard Cave Church, Lunzjata l/o Rabat’.
74 Wettinger 2000, 44.
75 M. Buhagiar 2007, 98.
76 Blondy 2010, 9-12.
77 K. Buhagiar 2012, 156-61.
Wied ir-Rum was subjected to during this period must have entailed significant capital investment. Initially it was a labour intensive process which consisted of the construction of land terraces, the excavation of troglodytic dwellings and perched aquifer water galleries in areas of exposed Mtarfa Member deposits. Both caves and galleries are difficult to date, but it appears that the latter might be twelfth or thirteenth century efforts to improve the hydrological potential of these valley-sites. The resultant agricultural arrangement became known as *giardino*. In the absence of subsurface investigation of various key areas of Wied ir-Rum, the proposed dating is only approximative. A number of caves included in this study may well have been abandoned as late as the first half of the twentieth century. A number of caves at Għar Żerriegħa in Wied ir-Rum, are still currently in use as places of habitation and animal pens. This continued occupation would have resulted in a major disturbance of older layers. Moreover, it is likely that most cave-units at Wied ir-Rum only preserve shallow internal deposits and probably lack stratification. On the other hand, the future investigation of the terraced land situated in front of a number of the cave-settlements at Wied ir-Rum might prove to be a more fruitful exercise in this respect. Surface counts of potsherds can perhaps lead to the identification of a settlement’s dumping ground.

**Conclusions**

This study will hopefully succeed in drawing more attention to the historical and archaeological importance of Wied ir-Rum and its neighbouring areas. The principal find presented within this essay, is the tentative association of a finely cut rectangular cave located in the San Ġakbu area with the church of St James, visited and described by Pietro Dusina in 1575. It is likely that the church was deconsecrated soon after the visitation report was drawn up, and since then it appears to have faded from folk memory. In the decades, if not centuries following its abandonment, the cave was converted into an animal pen, as evidenced by the feeding troughs excavated into its west and east facing walls. The cave’s architectural elaboration and the various cross carvings noted within are difficult to date, but certainly imply that this was a rock-hewn

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79 A surprisingly large number of caves at Għar Żerriegħa in Wied ir-Rum, are still in use as places of habitation and animal pens.
space of some importance, which stylistically stands out when compared to other caves found in the area. The relevance, function and usage of a much smaller cave (Fig. 11), located in very close proximity to the former and in which other cross carving were noted is so far unclear and necessitates further investigation. Archival and field-research are ongoing and will be concentrated on the investigation of the water gallery which underlies cave 3 at Ta’ San Ġakbu. A more accurate field survey of the terraced land at Ta’ San Ġakbu for traces of ceramic scatters and any other archaeologically relevant features is also envisaged.

It is also proposed that a subterranean circular bath located within the Ta’ Baldu estate at Wied ir-Rum dates either to the high or the late medieval periods of Maltese history. The bath, furnished with a perennial water source obtained from an adjoining water gallery, is a unique typology in Malta, but is similar to rock-cut subterranean chambers in Palermo, Sicily, known as the Camere di Scirocco, the earliest documentary evidence for which dates to the late fifteenth century.

Problematic to any future scholarly reconnaissance of Wied ir-Rum is the frequent change in landownership, particularly sensitive areas of the valley are being exposed too. Often unaware of the cultural and archaeological importance of the territory they are so fortunate to own, soil excavations and significant changes to field terrace levels are brought about, to the detriment of archaeologically relevant deposits which, if scientifically studied, may greatly increase our knowledge on the former human occupation of the area. Equally problematic is the recent closure of country lanes, which, for centuries were utilised as public access routes into the valley.