Archaeological Survey of the Oases of Zarabag, Karabag and Kampyrtepa in the Piedmont of the Kugitang Mountains, South Uzbekistan – Preliminary Report for the Season 2016

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ABSTRACT
This preliminary report summarizes the results of the archaeological research in the oases in the Kugitang Piedmont after the second season (summer 2016). The field survey in the Zarabag Oasis, which was the subject of our interest in the first season, was accomplished and the research continued in the oases where the villages of Karabag and Kampyrtepa are situated. The prospection led to the detection of new archaeological sites in both of them. Moreover, the examination of the sites previously known from earlier works was conducted. Besides this we focused on the the mapping of the water sources. The collected data have been processed in GIS and the finds were analysed and dated. Preliminarily, we observe basically a similar dynamic in the settlement patterns of all the researched oases.

KEYWORDS
Central Asia; oasis; field survey; settlement dynamic; Bactria; Tokharistan; Sapalli Culture; Yaz Culture.

INTRODUCTION

Archaeological research of the oases situated in the piedmonts of the Kugitang Mountains continued from the previous season. The prospection conducted in the season 2015 in the oasis of Zarabag was preliminarily presented in *Studia Hercynia* XIX (Augustinová *et al.* 2015, 262–281). In this second season, the archaeological survey in the Zarabag Oasis was successfully accomplished and the research continued in two neighbouring oases, corresponding to the modern villages of Karabag and Kampyrtepa. This report summarizes the newly gained data from the research area.

RESEARCH BACKGROUND

The long-term aim of the research of the Institute of Classical Archaeology at Charles University led by Ladislav Stančo is to study the settlement patterns both in the historical and prehistoric periods in the steppe belt of the Kugitang Piedmont (Danielisová – Stančo – Shaydullaev 2010, 67–90; Stančo *et al.* 2014, 31–41; Augustinová *et al.* 2015, 262–281; Augustinová – Stančo 2016, 122–138; Stančo 2016, 73–85; Stančo *et al.* 2016, 86–111; Lhuillier 2016, 112–121). The combination of the data gained during the field survey in the oases (Augustinová *et al.* 2015, 262–281; Augustinová 2016) with the data from the extensive prospection in the surrounding steppe landscape (Stančo *et al.* 2014, 31–41; Stančo 2016, 73–85), and

the data gained during the excavations of the Czech archaeological team in cooperation with Uzbek and French archaeologists (Stančo *et al.* 2014, 31–41; Stančo *et al.* 2016, 86–111; Lhuillier 2016, 112–121), as well as the information from excavations of the other archaeological teams in the given area (Mkrtychev *et al.* 2005; Gruber *et al.* 2012, 339–375; Kaniuth *et al.* 2010, 129–164) form the picture of the landscape during the various periods in the past.

OASES RESEARCHED IN 2016

During two survey seasons (autumn 2015, summer 2016), prospection was conducted in three oases in the piedmonts of the Kugitang Mountains. The largest of them – the Zarabag Oasis – has been completely investigated and the research results have been analysed (Augustinová 2016). The data collected so far in two others oases (Karabag and Kampyrtepa) are summarized in this preliminary report.

The second research season took four weeks at the turn of August and September 2016. As in the previous season, it consisted of a field survey in the oases and their vicinity and of the processing of the archaeological material. The survey and documentation of material were carried out by a team of three students, A. Augustinová, L. Damašek and M. Mrva (Institute of Archaeology at Charles University) led by A. Augustinová. Throughout the survey, we were accompanied by two local teachers, who helped us to communicate with locals. Oromiddin Aminov accompanied us in the villages of Zarabag and Kampyrtepa and Aziza Khaydkulova helped us with the communication in the village of Karabag. Some of the data were collected during the field survey in the steppe belt by L. Stančo (Institute of Classical Archaeology at Charles University). Most of the finds were dated according to the expert examination of Sh. Shaydullaev.

GOALS AND METHODS

The natural conditions in all of the investigated oases are similar, thus we used basically the same or a very similar set of research methods (Augustinová *et al.* 2015, 262–281). The archaeological research in the oases and their surroundings was conducted, generally speaking, by way of extensive prospection. Several different goals, however, demanded the use of various approaches. The purpose of the extensive survey is to cover (or more precisely – uncover) in an equal way as much of an area as possible. The fitness of the surveyed area for study depends on the character of the place; i.e., for instance, on the extent of utilized agricultural area and the density of the overgrowth, on the rate of ploughing, crop growing in the gardens, level of the built-up area, extent of the waste disposal areas, the way of use of the public places etc.

We focused on the acquisition of surface archaeological material that could, in combination with the precise spatial data, help us to reconstruct the settlement dynamic during the past. The survey was complemented by use of a metal detector; the assemblage of archaeological material was augmented by an otherwise invisible important group of artefacts. As for the field work strategy, in the first step we focused on the apparently significant sites, i.e. those that were well-known to the local population and typically reported as being 'old' or 'ancient', whatever that means. Afterwards we paid special attention to the modern and pre-modern cemeteries, since it had been observed earlier that during the digging of graves, diggers occasionally disrupt earlier settlement or burial levels and bring to light artefacts deposited in them. These artefacts are usually placed on the new grave as decoration (Stančo – Tušlová

eds. in print, chapter 2.2.4.). In the next step we focused on the prominent topographic surface features, which are supposed to be of an anthropogenic origin.

Last but not least we focused on the water sources in every oasis, and on their spatial relation to the settlement. Numerous springs were detected in each of them and in the Zarabag Oasis we even detected the *karezes*.

The documentation base was the same in each of the above mentioned studied topics. The important points (corresponding with the artefacts' findspots, significant topographic features, the space demarcation etc.) were located by a GPS Garmin eTrex. Afterwards the spatial data were processed by QGis and further analysed.

An integral part of the field survey was the photographic documentation of the features, objects, and situations. The finds – mostly the ceramic fragments or vessels – were taken to the base and photographed and drawn. In several cases the vessels were given back to their finders, in most cases, however, they were subsequently deposited in the Termez Archaeological Museum.

The only available topographic map for the research area that was created by the Soviet Military in 1983 (**Pl. 4/1**; at a scale 1:100 000) was not sufficient for our aims. Thus, as the underlay map for our work, we have used the satellite imagery provided by Google Earth.

THE LOCATIONS AND NATURAL CONDITIONS

All three oases are situated in the western part of the Sherabad District of the Surkhandarya Province (south Uzbekistan), forming the northern part of the Pashkhurt Basin. They lie approximately 6–11.5 km to the north of the centre of the village of Pashkhurt (Zarabag: 6.3 km; Karabag 7.5 km; Kampyrtepa 11.2 km). The border between Uzbekistan and Turkmenistan runs along the ridge of Kugitang 9.5 km to the west of the Kampyrtepa Oasis which is the westernmost of the three oases. They are located in the steppe belt of the piedmont of the Kugitang Mountains – Zarabag (985 m.a.s.l.) E 66°44' / N 37°45'; Karabag (860 m.a.s.l.) E 66°48' / N 37°46'; Kampyrtepa (1,206 m.a.s.l.) E 66°41' / N 37°46'. The steppe decreases here slightly from west to east.

THE SURVEYED AREAS

THE SURVEYED POLYGONS

The prospection was conducted in the still intensely settled oases and their nearest surroundings. This fact is reflected in the types of the surveyed areas, types of finds, and their state of preservation.

The plots of the local inhabitants became the most frequented survey areas. The prospection was conducted mostly in gardens, orchards, in small fields, or in terrain disrupted by construction activities. Another type of survey polygons represented public places, such as areas in the surroundings of springs, paths etc. Besides these, we focused also on the cemeteries (see above).

It is important to note that in most cases the finds were not found *in situ*. They came from the places used for agriculture and pasture, from the waste disposal areas in the plots or areas used in another way, and some of the finds had been found by the local people before our ar-

rival,[1] therefore, it is not possible to localize their exact findspots. The finds are localised with accuracy corresponding to the extent of the determined polygons / plots. Finds in an open landscape (for example the concentrations of the pottery fragments in the open terrain without clear limits) are localised in a square that represents the possible dispersion of the finds.

Based on the spatial data gained during the field survey, we created the polygons in the map using the QGis software. The polygons with the finds (POL_001–208), but also the polygons that lack them (negative results – NEG_001–064), are depicted in the map (**Pls. 4/2–4**). A detailed characterization of the first category – polygons with finds (POL_XX) – is summarized in Table 1 in the appendix (**Tab. 1**). The negative results represent the surveyed areas, where finds have been detected neither by the local people, nor by our field survey. Also places whose names refer to a possible anthropogenic origin, but where no finds have been found, were assigned to this category of negative results.

We also noticed places, where a survey could not be conducted for various reasons (e.g. the plot was overgrown with vegetation; we were not granted permission to gain access to the plot, etc.), but there may potentially be some archaeological evidence. Its information value is important only for future research, not for the interpretations of the surveyed area, that is why we do not lay out these areas here.

Each of the three studied oases covers a different area, which also affects the number of the survey polygons. Here follows a summary of the surveyed areas, the important sites and find spots are closely characterized in the description of the respective oasis:

In the Zarabag Oasis (approximately 425 ha), 135 polygons were surveyed with positive (POL_001–135), and 32 with negative results (NEG_001–023).

In the Karabag Oasis (approximately 276 ha), 63 polygons were surveyed (POL_136–196, POL_208) while 26 gave negative results (NEG_024–057, NEG_064).

In the oasis of Kampyrtepa (approximately 170 ha), 11 of the surveyed polygons produced positive (POL_197–207) and 6 negative results (NEG_058–063).

THE MORPHOLOGICAL FEATURES AND NOTICEABLE SPOTS

The next phenomena that we focused on were the morphologically prominent features in the terrain, the places with toponyms associated with their possible anthropic origin, and other significant objects. They are summarized in Table 2 (**Tab. 2**) and listed under the codes KuPi_001–060. The table contains their brief characteristic, coordinates, and finds. If some of these features extend in a wider area and there are some finds, it is also included in the category of polygons with finds (POL_XX).

In the Zarabag Oasis 44 such sites (KuPi_001–044) were recognized; in the Karabag Oasis there were 11 of them (KuPi_045–055); and in the oasis of Kampyrtepa five sites (KuPi_056–060). Their detailed descriptions are given in the respective subheads on specific oases below and their location is also depicted in the map (**Figs. 1–3**).

1 All of these facts we reflect in the evaluation of the results.

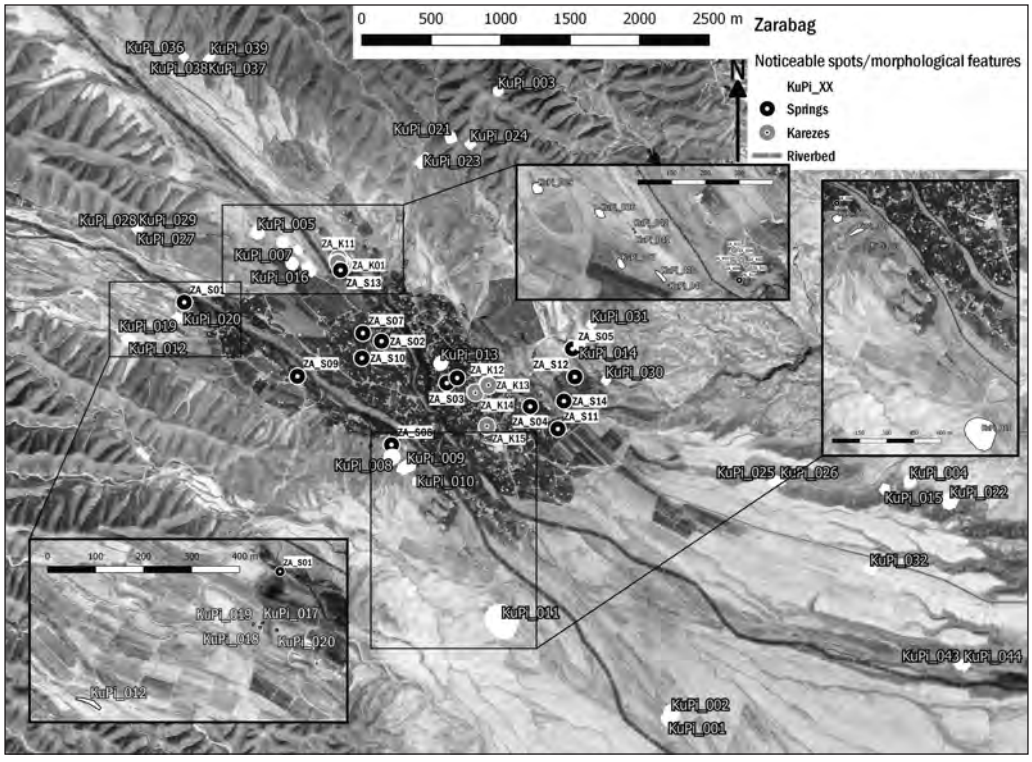


Fig. 1: Noticeable spots with finds and morphological features (KuPi_xx) in the Zarabag Oasis (map by A. Augustinová).

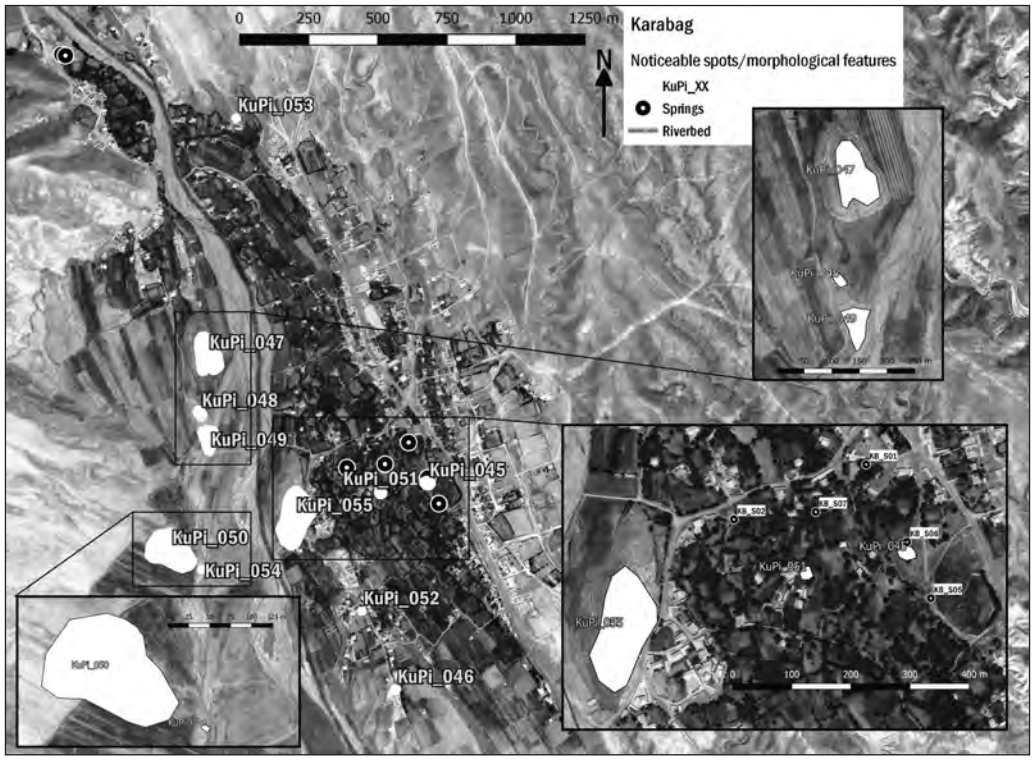


Fig. 2: Noticeable spots with finds and morphological features (KuPi_XX) in the Karabag Oasis (map by A. Augustinová).

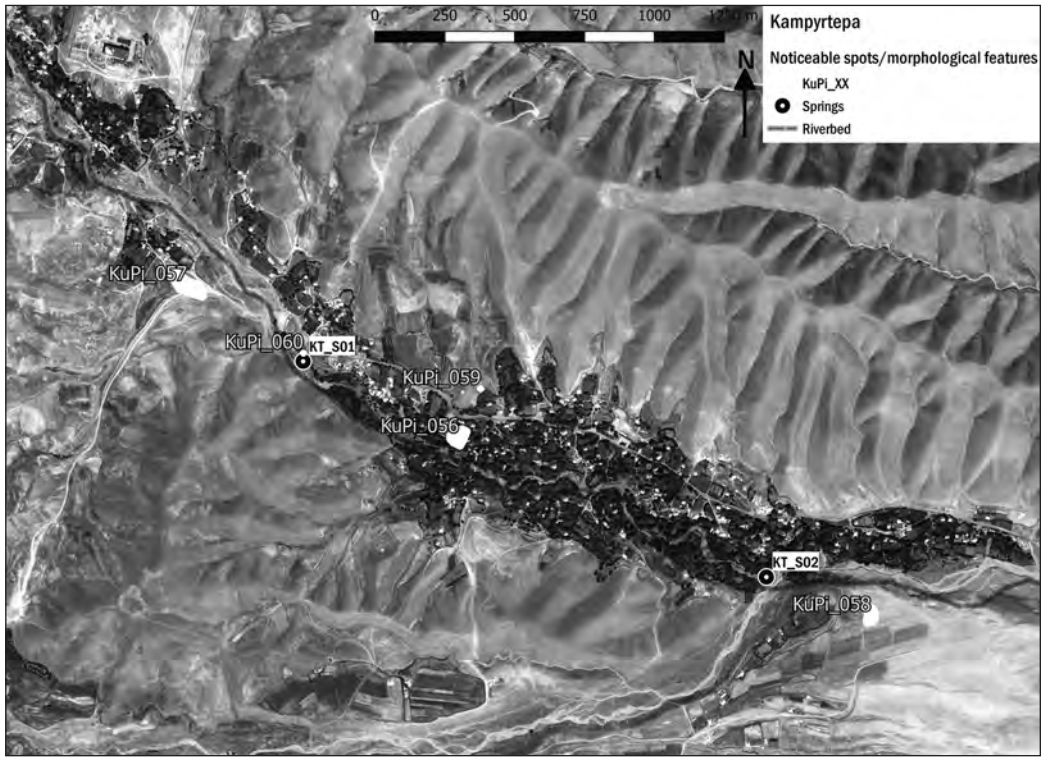


Fig. 3: Noticeable spots with finds and morphological features (KuPi_XX) in the Kampyrtepa Oasis (map by A. Augustinová).

WATER SOURCES

The water sources are the main prerequisite for a settlement today as in the past and therefore one of the aims of the survey was the mapping of them. The water springs were detected in each of the three surveyed oases, moreover in the oasis of Zarabag, there were detected even remains of *karezes*.[2]

In the largest one – the oasis of Zarabag – 14 springs were detected (ZA_S01–ZA_S14) that had already been listed in the report from the previous season (Augustinová *et al.* 2015, 262–281). In the village of Karabag seven springs were detected (KB_S01–KB_S07) and in the smallest oasis of Kampyrtepa we found only two springs (KT_S01–KT_S02). Again, they are closely characterised in the chapter on individual oases below. All of them are summarized in Table 3 (**Tab. 3**) and depicted on the map (**Figs. 4–6**).

2 *Karezes* are the underground tunnels that collect the underground water and bring it to the places where it is needed (see Chelebi 1983, 234). For more information, see Augustinová *et al.* 2015, 262–281 and Augustinová 2016.

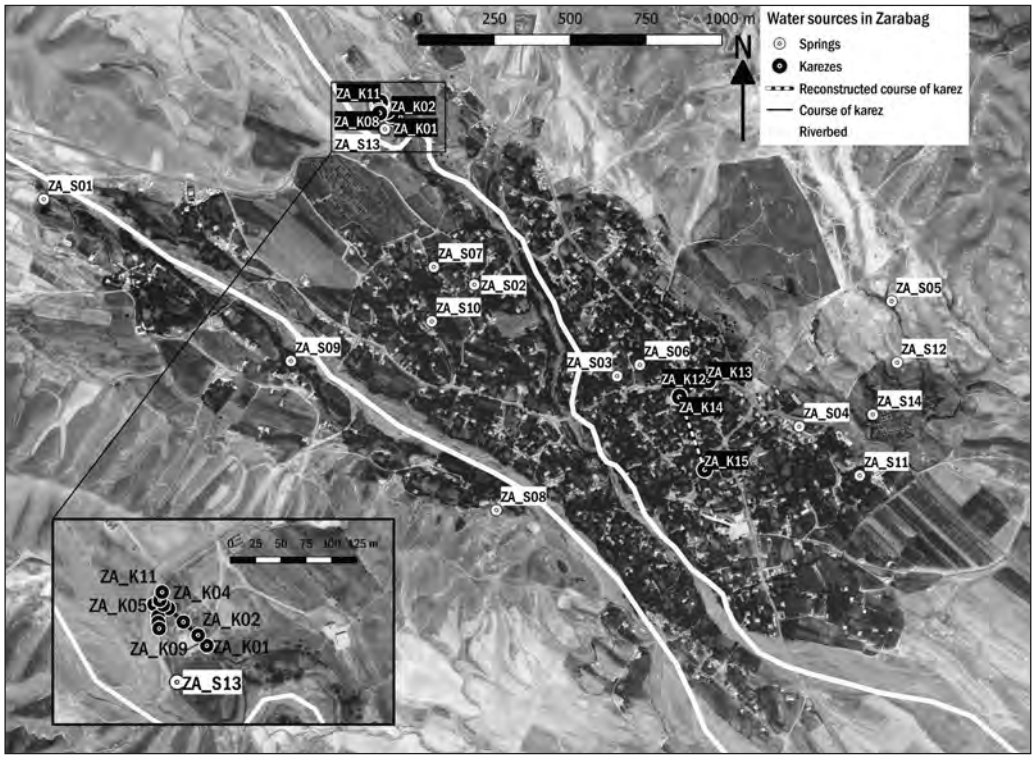


Fig. 4: Water sources – springs and karezes – in the Zarabag Oasis (map by A. Augustinová).

KARABAG

PRESENT STATE OF THE VILLAGE AND THE NARRATIVE SOURCES

The oasis of Karabag spreads over both the banks of the seasonal river called the Karabag Say[3] at a length of 3.3 km in the north-south direction. The current extent of the oasis is approximately 276 ha.

Based on the 2016 census, 4,375 people and 867 families lived in the village of Karabag; most of the inhabitants are Uzbeks whereas the inhabitants of Zarabag are supposed to be mostly Tajiks.

During the prospection in the oasis, we recorded the narration of a former Imam from the mosque in Karabag named Ximodinov Shahriddin Hojibobo.[4] Based on his account the history of Karabag began 1000 years ago.[5] In the vicinity of the spring near the mosque (KB_S01 – Kata Boloq) there was a stop-off for the caravans that went from the north (Tashkent, Samarkand, Karshi etc.) to the south across the Amu Darya to Afghanistan. Near this spring settled the second son of Genghis Khan – Chagatai Khan and it was him, who named the place Qorabog'[6],

3 The name Karabag Say is used by local inhabitants, but more appropriate would be the naming Karabag Darya (Say = Uzb. "river bed"; Darya = Uzb. "river").

4 *Ximodinov Shahriddin Hojibobo* (Aged 85?); village of Karabag - Sherabad District, south Uzbekistan; September 1st, 2016.

5 Take into consideration that the term "1000 years ago" used by locals is only an expression meaning "a history that they even do not know from the narrative, but only as a legend".

6 We used the English transcription of the title (*Qorabog' = Karabag*) to preserve the unity of the transcription with other titles in the paper.

meaning The Black Orchard and therefore the inhabitants of Karabag consider themselves today the lineal descendants of Genghis Khan. A small mosque for 15 people was founded 200 years ago[7] near the above mentioned spring by Afandi Xon – a man who came from Afghanistan and settled here. Later it was extended and in 1991 it was rebuild in the present form. This mosque serves for the Friday's prayers also for the inhabitants of the surrounding villages (Zarabag, Kampyrtepa, Shalkan and Kyzilalma) where no working mosques remain by now.

The ethnic origin of the inhabitants of Karabag is mentioned also in the work of B. Kh. Karmisheva (1976). In 1966 she recorded a narrative by Abdulla Atchilov a Karabag-born long-term co-worker with the historic-regional Museum in Termez as well as by a local teacher also born in Karabag. Based on their narrative, the founding of the village of Karabag was complicated. Fifteen groups of inhabitants all of different origin (*avlodi* = Uzb. "generation"; *tuda* = Uzb. "group") settled there. Members of this heterogeneous community entered into marriages with the inhabitants of neighbouring Zarabag (which differed in language) and with the inhabitants of Paskhurt (who did not differ from Karabag people, because all of them were Chagatay).

WATER SOURCES

Seven springs were detected in the village of Karabag (**Fig. 5**; KB_S01–KB_S07; *buloq* = Uzb. "spring") and six of them have a local name. Near the mosque springs the Kata Buloq (KB_S01; *kata* = Uzb. "Big"); in the narration of the Karabag mosque former imam (see above) this spring was connected with the earliest history of the village. The Ashrav Buloq (KB_S02) bears the name of a person unknown today. The Tosh Buloq (KB_03; *tosh* = Uzb. "Stone") and Chikes Buloq (KB_S04; *chikes* = Uzb. "Bull") are situated close to each other in the north of the Karabag Village. The Dzhida Buloq (KB_S04; *dzhida* = type of fruit) springs in the central part of the village, not far away from the spring of Bakhodin Buloq (KB_S06; Uzb. "Bakhodin's spring"). The last nameless (or Orom[8]) Buloq (KB_S07) is also situated in the central part of the village.

THE MORPHOLOGICAL FEATURES AND THE LOCATIONS WITH ARCHAEOLOGICAL EVIDENCE

During the prospection, 63 places with finds of archaeological material were detected (POL_136–196, POL_208; **Pl. 4/3**), which are summarized with coordinates in the table (**Tab. 1**), as well as 26 places with negative results (NEG_024–057, NEG_064).

Four sites in the Karabag Oasis had already been mentioned in the earlier literature – Khush-Vakttepa (Arshavskaya – Rtveladze – Khakimov 1982, 134; Rtveladze – Khakimov 1973, 22; Rtveladze 1974, 77; Stride 2004, code Uz-SD-233; Danielisová – Stančo – Shaydullaev 2010, 83, code 057), Kurgantepa (Arshavskaya – Rtveladze – Khakimov 1982, 134; Stride 2004, code Uz-SD-163; Danielisová – Stančo – Shaydullaev 2010, code 116), Gilyam Pusht (Arshavskaya – Rtveladze – Khakimov 1982, 134; Stride 2004, code Uz-SD-152; Danieli-

7 Term "200 years ago" used by locals is only an expression meaning "a time ago".

8 This spring had no name before our prospection. But because of a wedding ceremony in a nearby household during our survey, the local people that helped us with the communication and translation in the villages, named this spring Orom Bulok at this occasion (*orom* = Uzb. "Happiness"). This information has rather an ethnological character without any importance for our research purposes. Nevertheless, it represents an important component of the formation of the society and their relation to their surroundings.

sová – Stančo – Shaydullaev 2010, code 115) and Mazaristantepa (Arshavskaya – Rtveladze – Khakimov 1982, 134). The identification of some of these sites with the sites detected during our survey is, however, slightly difficult, since the names used by the local population have probably changed over the last forty years.

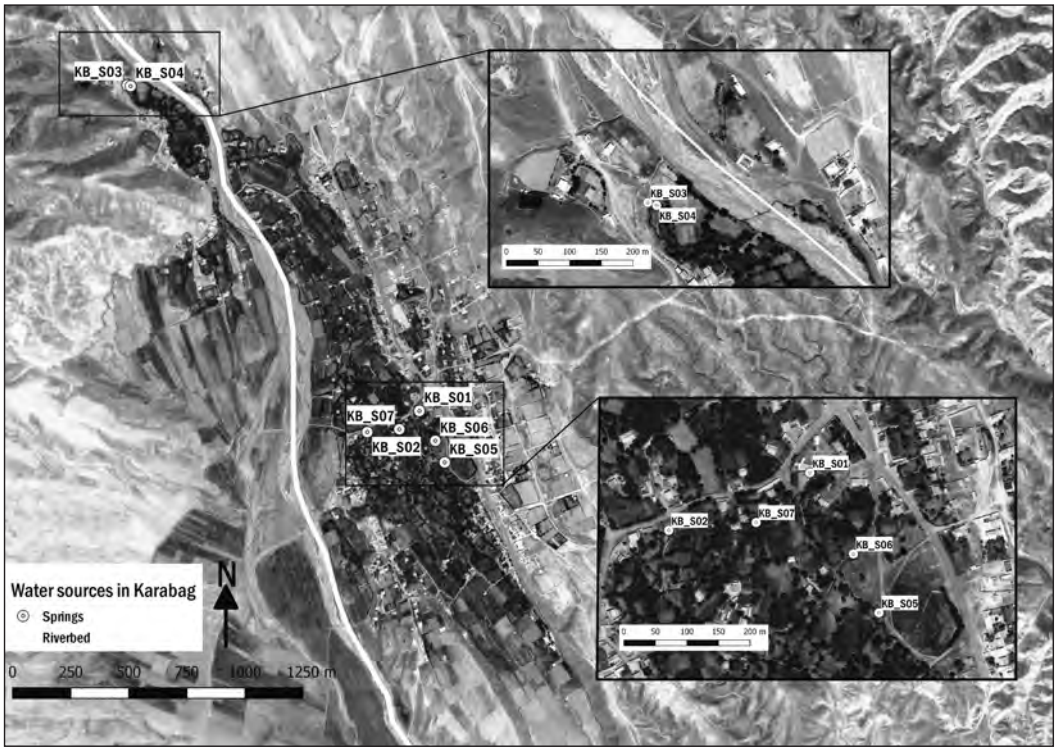


Fig. 5: Water sources – springs – in the Karabag Oasis (map by A. Augustinová).

The site called Khush-Vakttepa[9] (KuPi_051; POL_139) was already known to the Czech-Uzbek team, since it had been surveyed during two short visits: for the first time on 3rd September 2009 and then again on 15th September 2010. The pottery material gained from the site hinted at dating to the Kushan and High Medieval period (13th c.), but perhaps also to the Early Medieval (5th–7th c.) and Pre-modern times (17th–18th c. AD).[10] The location in earlier works corresponds in this case with our detections: it is situated in the centre of the Karabag village among the gardens and houses on the left bank of the Karabag Say. The small compact mound (ca. 9×13 m; h. 3.5 m) is unfortunately gradually disrupted by digging clay for the construction works. Due to this fact, there are visible sections with clearly recognizable cultural layers that contain pottery fragments (**Pl. 4/5**). Based on the ceramic fragments that we sampled from the recognized settlement levels, these were dated to the end of the 4th–5th c. AD, to the 11th c., and to the Pre-modern period (18th–19th c.), (**Figs. 6:3** and **4**; **7:1** and **2**), which corresponds roughly to our previous dating. Other pottery fragments have been collected in the nearest surroundings of this mound. These are supposed to be closely connected with this site, and are dated to the Bronze Age and to the Early Medieval period (5th–7th c.).

9 The name Khush-Vakttepa (*vakt* = Uzb. "Time") is mentioned in the earlier works (Rtveladze – Khakimov 1973; Rtveladze 1974; Stride 2004; Danielisová – Stančo – Shaydullaev 2010), but during our present field survey it was presented to us as Khudzboktepa (*khudzhbok* = Taj. "Pleasure").

10 Two scholars were consulted with different results.

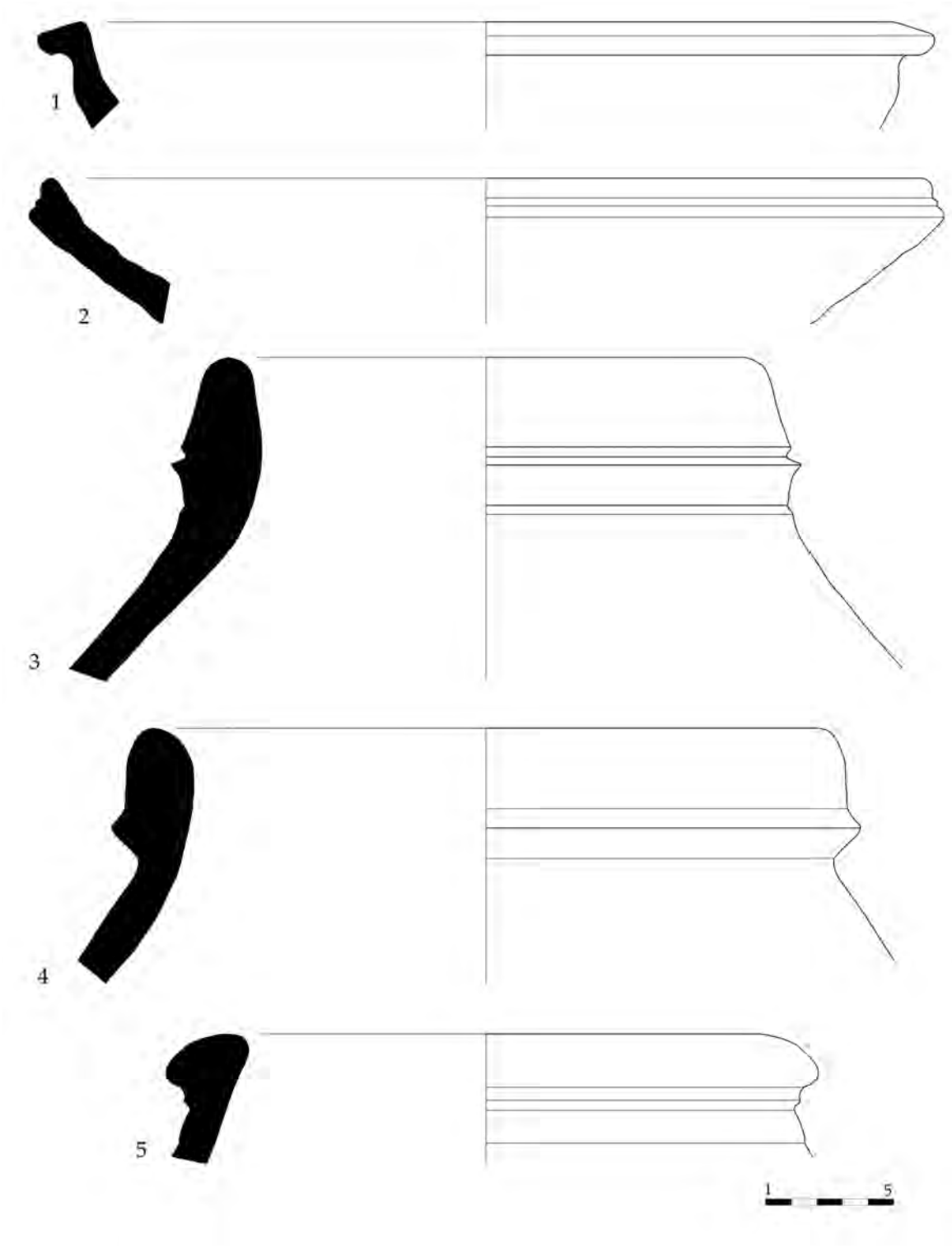


Fig. 6: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 and 5 – Dauron Tepa (KuPi_049), High Medieval (12th c.); 2 – Kurgan Tepa (KuPi_055), Late Bronze Age (Sapalli culture); 3–4 Khushvakttepa (KuPi_051), Early Medieval (5th–7th c.); (drawing by T. Kolmačka).

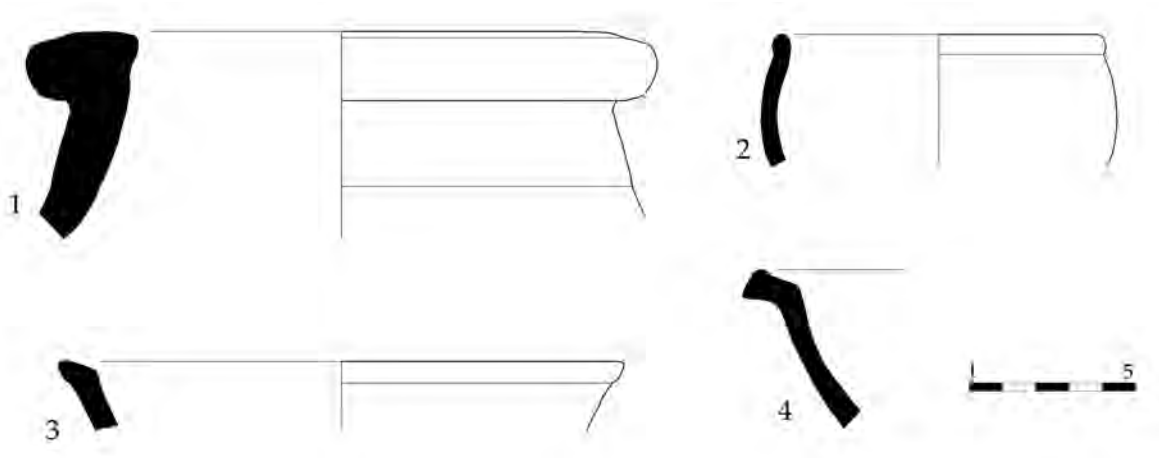


Fig. 7: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 – no name (POL_140), Early Medieval (5th–6th c.); 2, 4 – Khushvakttepa (KuPi_051), 2 – Bronze Age, 4 – Early Medieval (6th–7th c.), ; 3. no name (POL_161) – Late Bronze Age (Sapalli culture); (drawing by T. Kolmačka).

The Kurgantepa (KuPi_055; POL_142) is mentioned in earlier works as a rectangular mound (30×60 m) where the archaeological material dated to the Medieval period was found (Arshavskaya – Rtveladze – Khakimov 1982, 134). The Czech-Uzbek team surveying Karabag in 2010 identified Kurgantepa with a small mound on which a mosque stands (see above); this identification, however, was far from sure and pottery collected on the surface was not significant enough to date the site (these observations have not yet been published). During our new survey in 2016, on the other hand, the place of the modern cemetery was shown to us by the locals under this name. During our prospection numerous ceramic fragments were detected. In the lower part of the cemetery there were denser concentrations of pottery (59 selected fragments – KA014-01–59) in the upper part, which has the shape of a huge mound,[11] the ceramic fragments were more sporadic (30 frags. – KA012-01–30). The ceramic fragments were dated to the Late Bronze Age (two frags.), Early Medieval (5th–6th c.; seven frags.), High Medieval (10th–12th c.; 55 frags.), 12th–13th c. (one frag.), 18th–19th c. (26 frags.), (**Figs. 6:2**; **8:1**; **9:2** and **3**; **10:1** and **2**; **11:1**). The pottery from the Early Medieval period was situated only in the lower part of the cemetery of Kurgantepa. The upper part is not used for funeral purposes nowadays; the Karabag people are still well-aware of the former funeral function of the summit, and it is therefore not allowed to place the new burials up there.

Based on the information on earlier surveys (Arshavskaya – Rtveladze – Khakimov 1982, 134), there should be a site called Gilyam Pusht in the central part of the village. Reportedly, it was a small mound (d. 20 m, h. 2 m) with an assemblage of finds belonging to the Medieval period. Again, after our earlier survey in September 2010 we identified this description with a place located in the central part of the village and used as a cemetery once (these observations have not yet been published). Our recent survey in 2016 verified this identification: under the name Gilyam Pusht (NEG_052) the locals showed to us the same cemetery again.

11 According to a local legend there should be an underground tunnel which connected the *Kurgantepa* with *Kush-Vakttepa*.

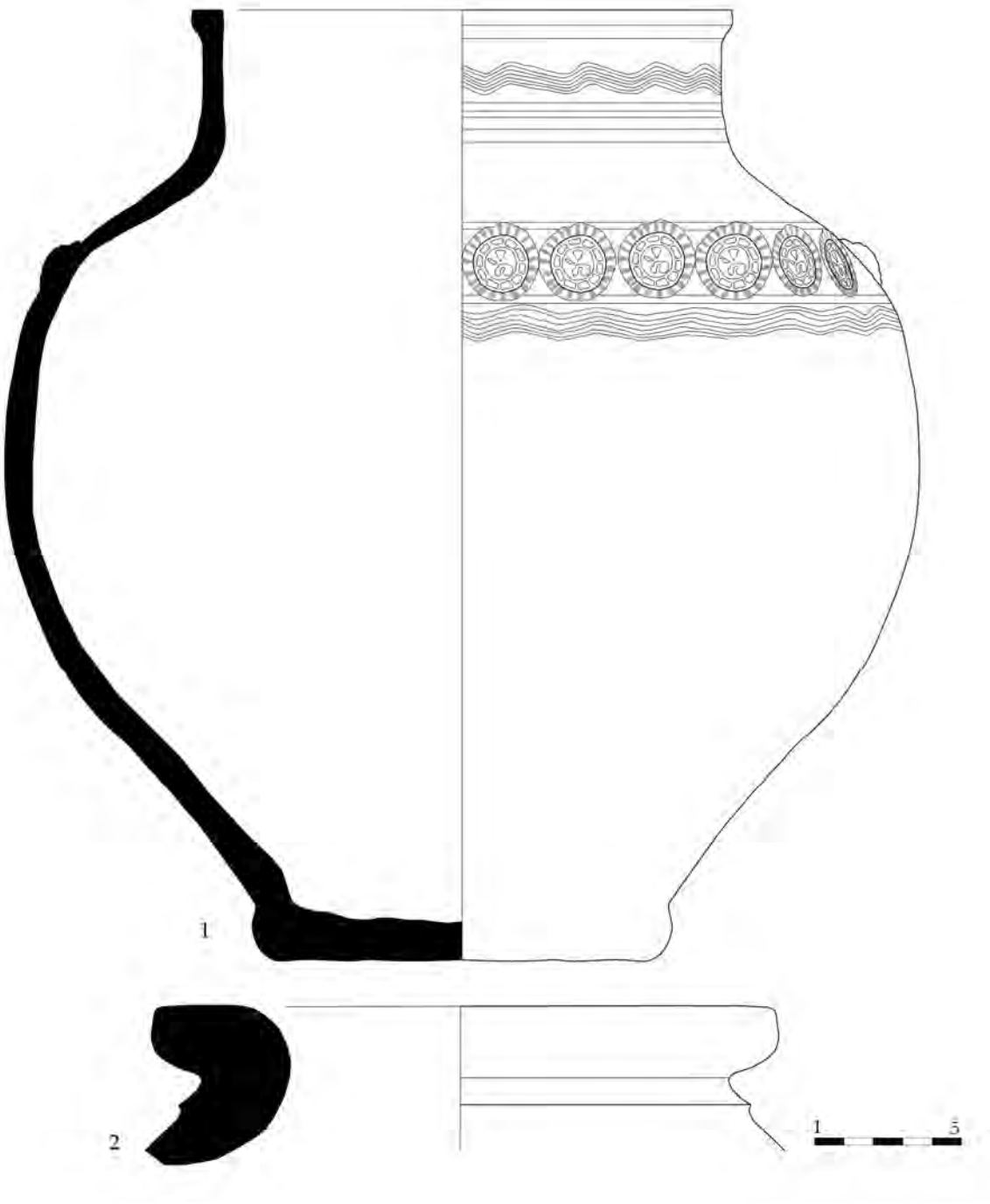


Fig. 8: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 – Kurgan Tepa (KuPi_055), High Medieval (12th c.); 2 – Dauron Tepa (KuPi_049), Early Medieval (5th–6th c.); (drawing by T. Kolmačka).

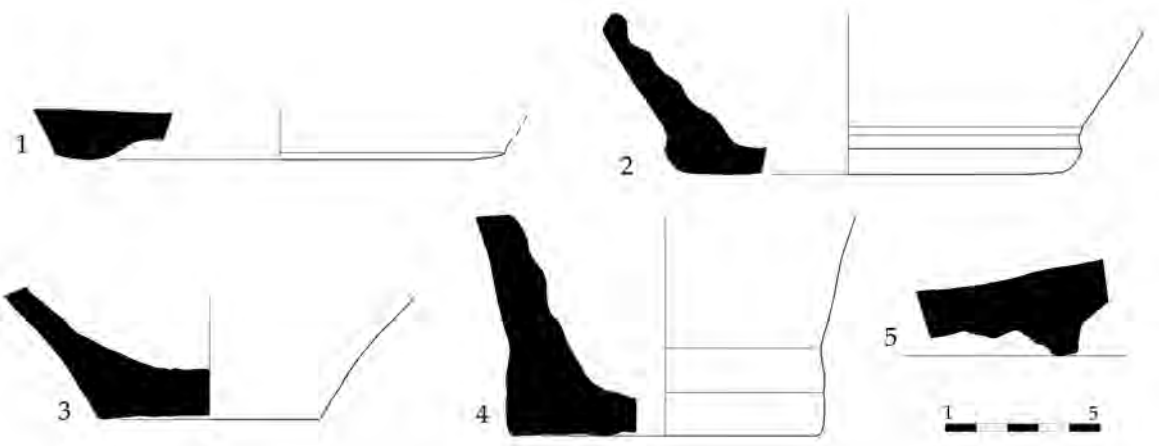


Fig. 9: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 – no name (POL_140), High Medieval (13th c.); 2–3 – Kurgan Tepa (KuPi_055), High Medieval (10th–11th c.); 4 – Dauron Tepa (KuPi_049), High Medieval (12th c.); 5 – no name (POL_140), Bronze Age; (drawing by T. Kolmačka).

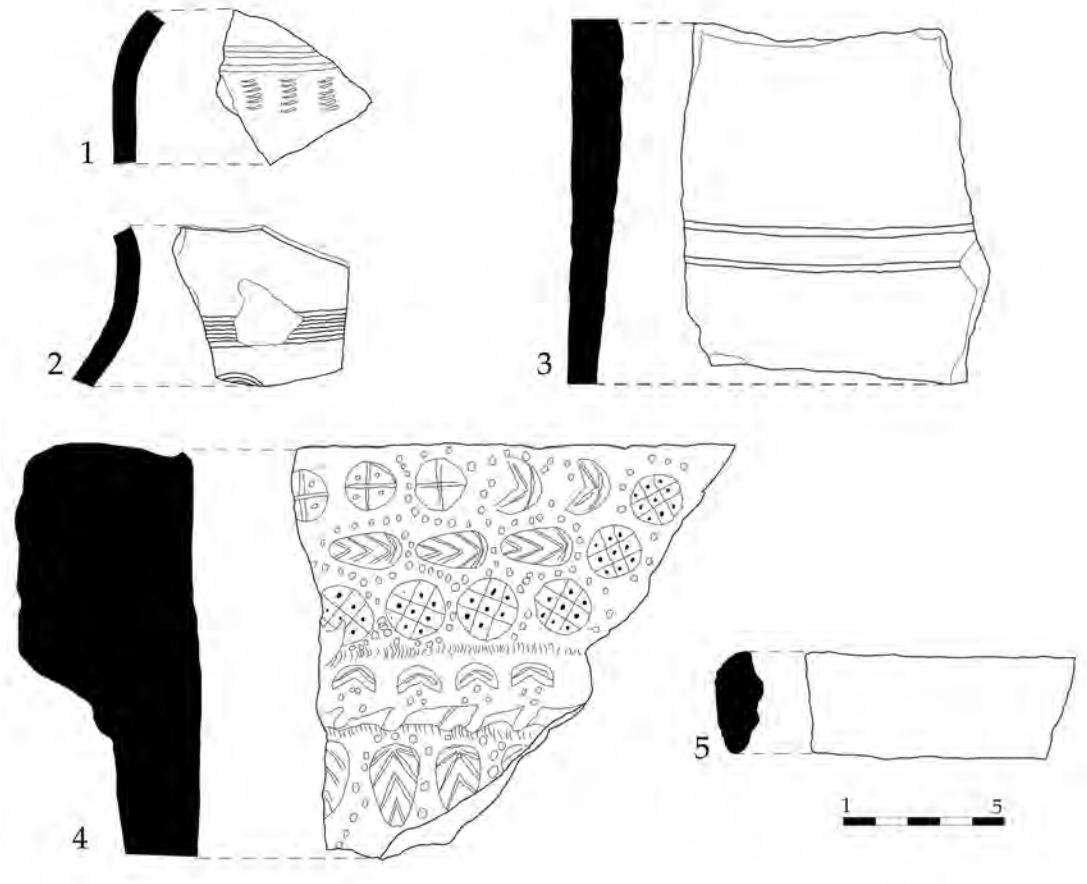


Fig. 10: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 – Kurgan Tepa (KuPi_055), High Medieval (10th–12th c.); 2–3 – Dauron Tepa (KuPi_049), 4th/5th c.; 4 – no name (POL_163), High Medieval (12th c.); 5 – no name (POL_149), High Medieval (10th–11th c.); (drawing by T. Kolmačka).

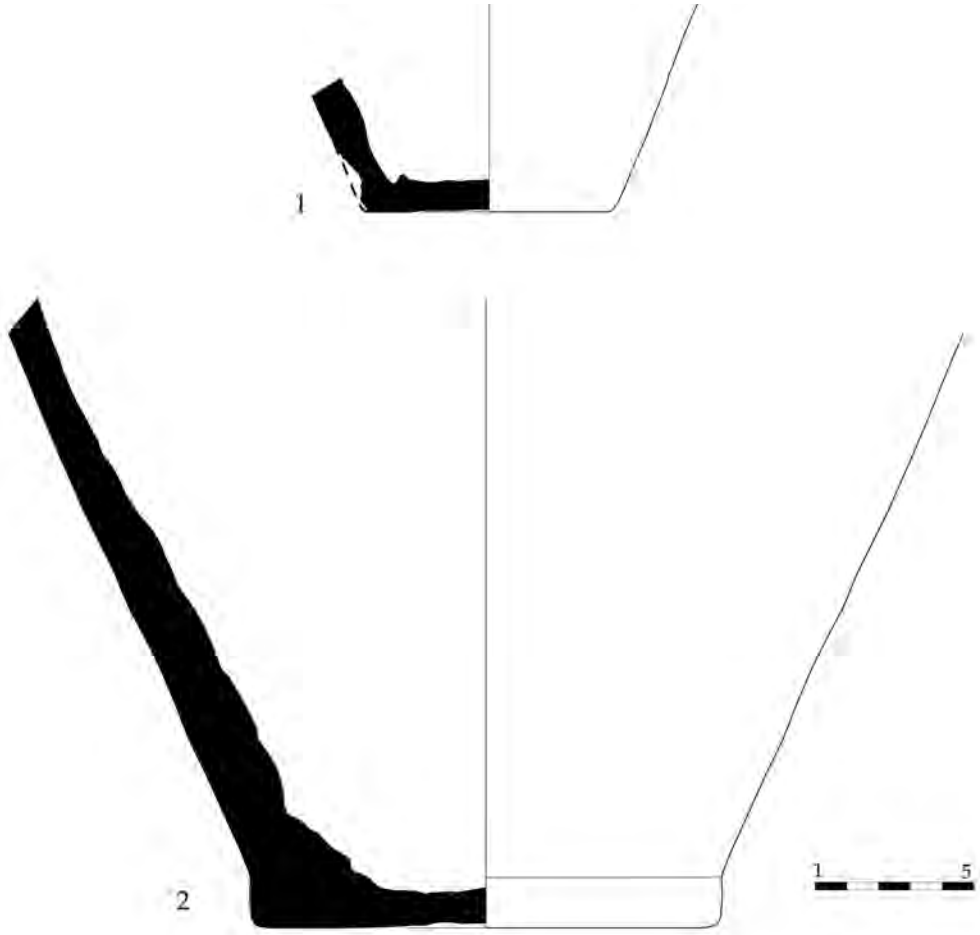


Fig. 11: Selected pottery from the surface survey in the Karabag Oasis. Findspot and dating: 1 – Kurgan Tepa (KuPi_055), Early Medieval (5th–6th c.); 2 – no name (POL_137), High Medieval (12th c.); (drawing by T. Kolmačka).

Even though it is not used for burials any more, there is still the fence around this area, and the Karabag inhabitants are well aware of its former funeral function. The site is situated in the central part of the Karabag village at the main road, and its surface covers an area of 1.3 ha. Most of the site was overgrown with dense grass during both of our prospections, but in the places without vegetation including several dug pits, some archaeological material was found.

The identification of the last mentioned site – Mazaristantepa – with the sites detected during our survey is very difficult. This site with finds belonging to the Medieval period is reportedly situated on the left bank of the Karabag Say (Arshavskaya – Rtveladze – Khakimov 1982, 134), nevertheless we did not detect any site of this name.

There are three kurgans[12] among the noticeable sites considered by local people as historically significant – Kush-Vakttepa (KuPi_051; POL_139), Kurgantepa (KuPi_055; POL_142), and Bakhodin Balogardon (Uzb. "The man, who averted a disaster"[13]; KuPi_045; NEG_057). The first

12 The term "Kurgan" represents at this point the name given by the local inhabitants, it cannot be understood strictly in the archaeological sense.

13 *Bakhodin* = Uzb. is a name of a theologist; *Balogardon* = Uzb. merit of this theologist => *balo* = Uzb. disaster; *gardon* = Taj. return.

two have already been dealt with above. At the place called Bakhodin Balogardon (KuPi_045; NEG_057) a water basin was constructed, which perhaps disturbed or destroyed this feature. Today, there are no apparent remains of the site visible on the spot, and no archaeological evidence has been detected.

Besides these "kurgans" and the sites mentioned in earlier literature, we detected several other sites with a significant amount of archaeological evidence. There is a hill with the peak platform (125×60 m) called Bilgardon (KuPi_047; *bil* = Uzb. "know"; *gardon* = Taj. "return"), which is well visible from the wider surroundings. It is situated on the right bank of the Karabag Say in the central part of the village. On the surface of the summit platform some pottery fragments were collected, dated to the High Medieval period (12th c.; four frags.) and to the Pre-Modern period (18th–19th c.; seven frags.).

In the vicinity of Bilgardon there were two other scatters of archaeological material (to the south of Bilgardon). The site KuPi_048 lies 125 m to the south of Bilgardon and has the shape of a small mound (25×13 m). Three pottery fragments were collected there dated to the 11th c. The place called by the locals Daurontepa (Uzb. "Tepa of better times"; **Fig. 12**) is situated 40 m further to the south of this mound. It forms a platform with an isosceles triangle ground plan (55×86×86 m; KuPi_049; POL_145); plentiful ceramic fragments were detected there (we sorted out 59 of them). Based on the dating of this material, this place was occupied at the end of the Late Kushan period (4th c.; two frags.), during the Early Medieval period (5th–6th c.; 12 frags.), High Medieval period (12th c.; 14 frags.) and in the Pre-Modern period (18th–19th c.; 31 frags.), **Figs. 6:1** and **5**; **8:2**; **9:4**; **10:3**.

Fig. 12: Early Medieval (5th–6th c.) and High Medieval (12th c.) site in the Karabag Oasis (POL_145) (photo by A. Augustinová).

Moreover, three pottery fragments belonging to the 11th–12th c. were found in the middle of the Karabag Say (POL_142) on an island in the middle of the seasonal river (although this island was probably only recently cut-off from the bank). This place is situated 55 m to the east of the KuPi_049 in the fields. All these sites (KuPi_047, KuPi_048, KuPi_049, POL_142) likely belonged to each other.

A very distinct hill (KuPi_050; 165×100 m) that is visible from the wide surroundings revealed only a few pottery fragments (seven pieces – four of them dated to the High Medieval period (11th c.) and three to the Pre-Modern period (18th–19th c.).

Another scatter of finds was detected in the middle part of the Karabag village between the three above mentioned springs Kata Buloq (KB_S01), Bakhodin Buloq (KB_S06) and the nameless spring (KB_S07), 80 m to the north-east of the Kush-Vakttepa (KuPi_051). Fifty pottery fragments were collected there dated to the Early Medieval and High Medieval period (see **Tab. 1**) including also material from the Pre-Modern period.

Another substantial scatter/cluster was detected in a garden (POL_170) having produced 45 fragments. Most of them (32 frags.) was dated to the Pre-Modern period, while the others belong to the Bronze Age (two frags.), Early Medieval period (5th–6th c.; five frags.), and to the High Medieval period (12th c.; four frags.).

In another garden (POL_182), most of the collected fragments (25 pcs.) belong to the High Medieval period (12th c.), the rest of them were identified as Pre-Modern pottery.

In the north of Karabag village, another scatter of ceramic fragments was detected in the field (POL_175). The finds belong to the Early Medieval period (three frags.), High Medieval period (11 frags.) and to the Pre-Modern period (13 frags.).

Pottery from a garden (POL_159) located in the central part of the village (just opposite Bilgardon (KuPi_047, across the Karabag Say), was dated to the Medieval and Pre-Modern periods, more precisely to the Late Medieval period (17th c.; 13 frags.), Pre-Modern period (eight frags.), Early Medieval period (5th–6th c.; eight frags.), and only two fragments belong to the 12th c.

Scatter (POL_183) was detected in yet another garden, where the majority of ceramic fragments belong to the High Medieval period (12th c.). In the same place was also found one fragment roughly dated to the 4th c. AD, which is, so far, rare in the Kugitang piedmonts.

In a garden marked as POL_148 in the vicinity of Kurgantepa (KuPi_055) a large group of ceramic fragments were detected dated to the High Medieval period (18 frags.).

Some archaeological material was detected also in other parts of the village of Karabag, we limit ourselves, however, to the above listed examples with more substantial results, while the find spots with less numerous fragments are summarized in table 1 (**Tab. 1**).

CEMETERIES AND CENTRAL PROMINENT TOMBS

Since the present burial grounds have often been continually used in various historical periods or are located in areas of previous human activities, they could help to unearth old cultural levels thanks to disrupting the surface and subsurface layers during grave digging. We also surveyed and documented these sites. If there were surface finds, we marked these cemeteries as polygons with finds (POL_XX), in case there were no finds, on the other hand, such cemeteries were marked as places with a negative result (NEG_XX). Attention was also paid to the centrally placed prominent tombs, which we understand as burials of important local authorities, most probably religious ones and thus we call them "graves of imams". These are sometimes an integral part of a cemetery, sometimes they are located separately.

Five cemeteries have been surveyed in the village of Karabag. Three of them (Kurgantepa – KuPi_055; Bakhodin Balogardon – KuPi_045 and Gilyam Pusht – NEG_052), are characterized above. No finds have been detected in the remaining two cemeteries.

The cemetery called Koziz (NEG_054) lies on the right bank of the Karabag Say (200 m to the west of the river) to the north of the Karabag village, and it is still used for burying. The whole area of this cemetery has the shape of a high mound with very steep slopes and covers an area of 0.5 ha.

On the opposite bank of the Karabag Say (200 m to the east of the river; 400 m to the east of the Koriz cemetery) is situated another cemetery, which is named after the central grave (Jalavli Mozor Bobo – Uzb. "Cemetery of the Grandfather Jalavli"; NEG_055). It is not used today, even the area of the cemetery (0.5 ha) is not delimited by a fence. The area of the burial ground is situated on a platform which is elevated ca. 2 m above the surrounding terrain.

As in the other oases, we detected several prominent tombs (perhaps graves of imams) in the Karabag village. They are typically covered with a small house made of stones/mud bricks/concrete, and often have a ritual function in the life of the local inhabitants. Jalavli Ota (KuPi_053; Uzb. "Father Jalavli") is connected with the old burial ground of a similar name (Jalavli Mozor Bobo – Uzb. "Cemetery of the Grandfather Jalavli"; NEG_055). The locals believe that a ritual linked to this place can heal cattle disease – if the cattle are ill, they bring them here and walk with them around the grave counter clockwise three times. In this way, the animal is supposed to be cured. The two other prominent tombs are isolated without any connection with an earlier burial ground that would still be remembered by the inhabitants, and the term "central grave" is therefore less appropriate. The Roy Bobo (KuPi_052) lies in the south part of Karabag. Around this grave, we encountered various traces of digging damage that was connected to the construction of houses in the vicinity, but there were no finds. The Khodzhulmat Yasaul (KuPi_054) lies in the vicinity of KuPi_054 at the western margin of the Karabag village close to the right bank of the seasonal river.

KAMPYRTEPA

PRESENT STATE OF THE VILLAGE AND THE NARRATIVE SOURCES

The third of the researched oases was the smallest one, it is situated where the present-day village of Kampyrtepa is. The oasis is connected with the Zarabag village by an asphalt road. It spreads 4.5 km along both banks of the Kampyrtepa Say, a seasonal river flowing from the Kugitang Mountains and becoming the left tributary of the Machay River. The oasis extends over an area of 170 ha.

The inhabitants are mostly Uzbeks and according to the census in 2016, in the village of Kampyrtepa, there lived 1,400 people grouped in 599 families.

A legend associated with Kampyrtepa was recorded in the village of Zarabag in 2016. According to this legend, the inhabitants of Kampyrtepa left their village for unknown reasons and wanted to move to the village of Pashkhurt. However, they were not accepted and therefore they continued to the village of Zarabag, where they successfully settled among the local inhabitants. The incoming Kampyrtepaens were subsequently buried in a nameless burial ground in Zarabag. Thus, the burial ground (KuPi_X013; POL_108),[14] should be the cemetery of the inhabitants originally from Kampyrtepa.

14 In the preliminary report for the Zarabag Oasis published in *Studia Hercynia* XIX it is labelled as burial ground B3 (Augustinová *et al.* 2015, 273).

WATER SOURCES

In the smallest oasis we detected only two springs (**Fig. 13**). The first of them, called Bosh Buloq, is situated in the northern part of the village (**Fig. 14**; KT_S01; Uzb. "Spring of the Chief") and springs in the vicinity of the isolated grave (KuPi_060) named Buloq Ota (Uzb. "Father of the spring"). The second one Okhun Buloq (KT_S02; "Okhun's spring") is situated in the southern part of the village.

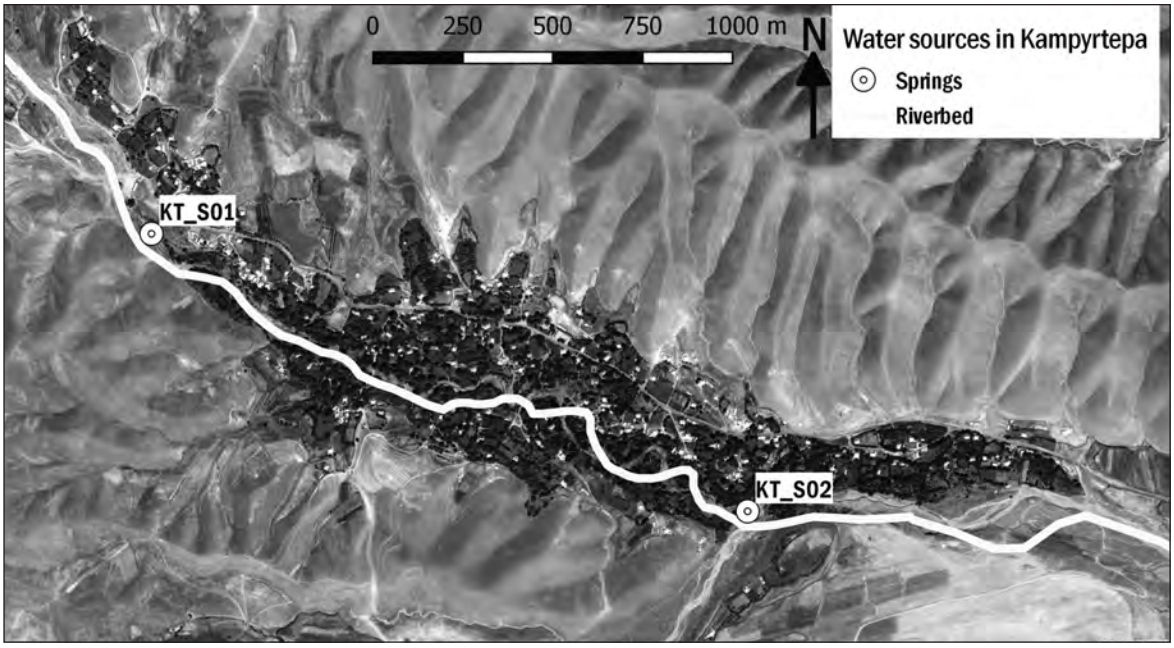


Fig. 13: Water sources – springs – in the Kampyrtepa Oasis (map by A. Augustinová).

Fig. 14: The Bosh Buloq (KT_S01) – spring in the northern part of the village of Kampyrtepa (photo by A. Augustinová).

SIGNIFICANT MORPHOLOGICAL FEATURES AND LOCATIONS WITH ARCHAEOLOGICAL EVIDENCE

During the survey, 11 places with archaeological finds were detected (POL_197–207; **Tab. 1**) as well as six places with negative results (NEG_058–063).

Three sites in the village of Karmpyrtepa contain the word *tepa* in their name, but only on the surface of the first of them (Eishntepa – KuPi_056; POL_201) a significant amount of pottery fragments have been detected. Fewer fragments have been collected in Oladüsttepa (KuPi_057; POL_197) while the third site – Seyidtepa (KuPi_058; POL_204) yielded only several fragments of Pre-Modern period pottery.

Fig. 15: South-west view of the site Eishntepa (KuPi_056) in the Kampyrtepa Oasis (photo by A. Augustinová).

Fig. 16: The stone structures detected in the disrupted surface on the site Eishntepa (KuPi_056) (photo by A. Augustinová).

Eishntepa, the first of them (**Fig. 15**; KuPi_056; POL_201), is situated in the western part of Kampyrtepa across the main road from the cemetery of Kampyrtepa Ota. The upper platform (70×45 m) of this site is elevated about 6 m above the surrounding surface, and there are several accumulations of stones (remains of graves? / stone structures?) visible on the platform. On the west side of the Eishntepa the surface is disturbed by a bulldozer built dust-road which – cut deep into the terrain – reveals two clearly recognizable linear stone structures, probably the remains of walls (**Fig. 16**). A large collection of ceramic fragments has been collected (58 items) that belong to several periods (**Tabs. 1** and **2**) – the Bronze Age (one frag.), 2nd–3rd c. AD (four frags.), 4th c. AD (two frags.), 5th–6th c. AD (three frags.), 10th–12th c. (26 frags.) and 18th–19th c. (22 frags.), (**Figs. 17:1–4** and **6**; **18:2–4**). Besides these fragments, also an entire storage vessel may have been found here; nowadays it is still in use in a neighbouring garden (**Pl. 4/6**).

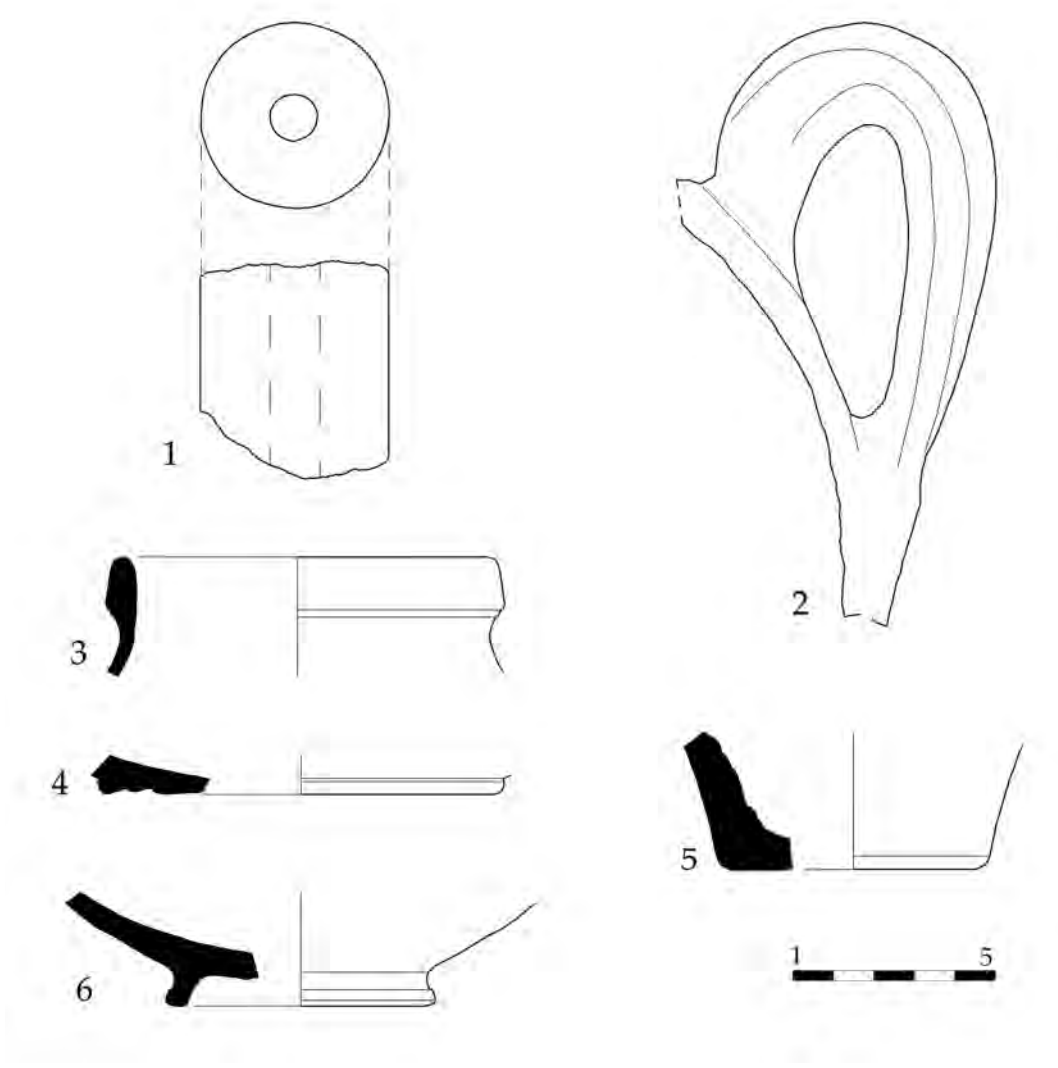


Fig. 17: Selected pottery from the surface survey in the Kampyrtepa Oasis. Findspot and dating: 1–4 and 6: Eishn Tepa (KuPi_056), 1 – Bronze Age, 2 – High Medieval (12th c.), 3 – Late Kushan (4thc.), 4 – Kushan period (2nd–3rd c.), 6 – High Medieval (12th c.); 5 – Oladüst Tepa (KuPi_056), High Medieval (12th c.); (drawing by T. Kolmačka).

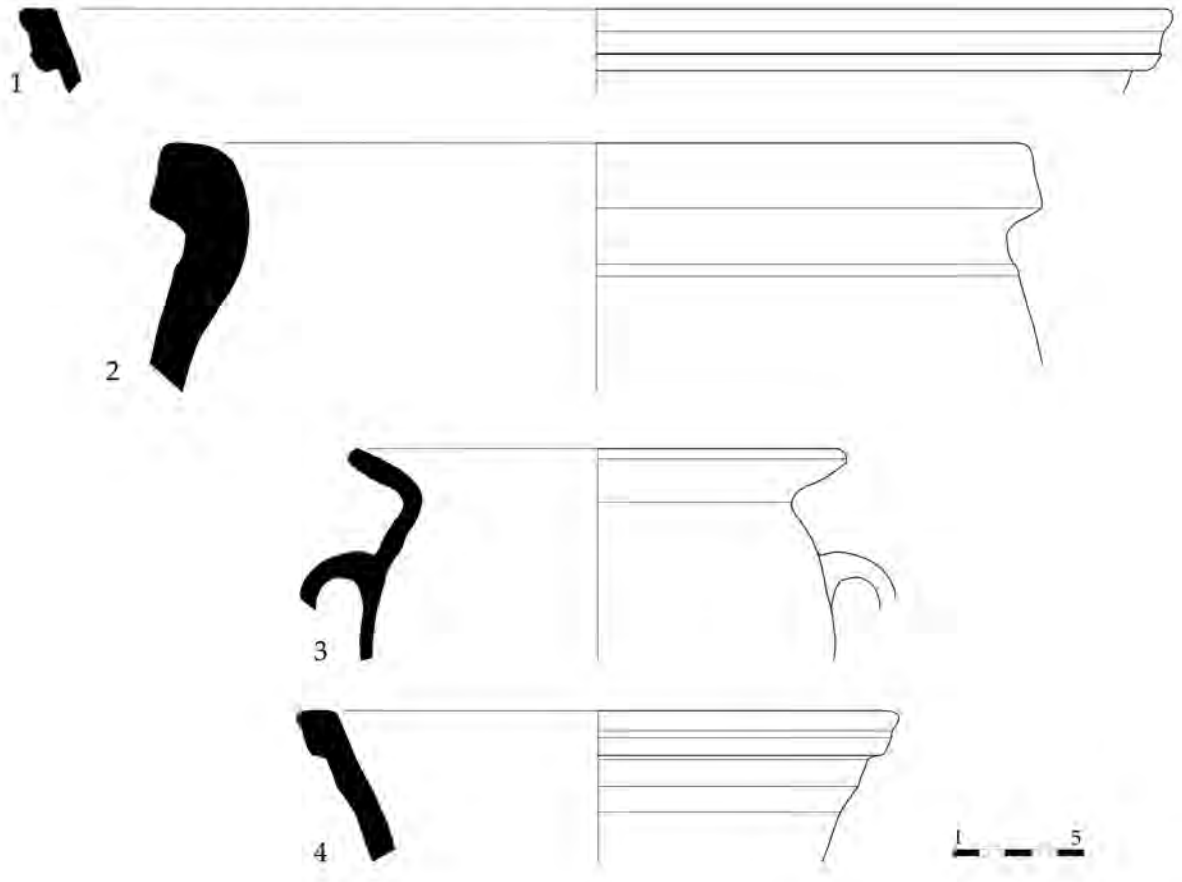


Fig. 18: Selected pottery from the surface survey in the Kampyrtepa Oasis. Findspot and dating: 1 – Kampyrtepa Ota (KuPi_059), High Medieval period (12th c.); 2–4 – Eishn Tepa (KuPi_056), High Medieval period (10th c.); (drawing by T. Kolmačka).

The second site named Oladüsttepa (KuPi_057; POL_197) is situated in the western part of Kampyrtepa on the right bank of the seasonal river. It is situated on a mound that with its height of about 10 m overlooks the surrounding terrain with the upper flat platform (90×25 m). The mound seems to be of a natural origin: if there was any settlement, it utilized this natural feature. Based on the testimony of the inhabitant of a nearby house, a ceramic vessel was found there, but it was taken away by the locals and we could not study it. The surface of the upper platform was disrupted, but only several fragments of pottery were found there, most of them detected in the place where the above mentioned ceramic vessel may have been found.

The third place with the element "tepa" in its name, is called Seyidtepa (KuPi_058; POL_104). This large mound is situated in the south-east part of the Kampyrtepa village. Even though no ceramic fragments were found there (apart from a mere three fragments of the Pre-Modern period), there are several stone structures on the surface. One of them could be interpreted as a kurgan, the rest of them are unclear accumulations of stones. The site has been disrupted by digging soil which revealed a large section through the subsoil. There are, however, no signs of the cultural levels visible in this section.

Although a large assemblage of archaeological material was found in the village of Kampyrtepa, its analysis shows that its large percentage is dated to the Pre-Modern period (18th–19th c.).

Most of the finds dated to the earlier periods come from the above mentioned tepas, burial grounds, and morphological features. There are only two other places (POL_199, POL_206), where among the Pre-Modern pottery one fragment dated into 12th c. was found. The first fragment was nevertheless found on a path amidst gardens (POL_199) and this fact prevents a hypothetical connection with any potential site. The second findspot represents the garden (POL_206) in the far south-east end of the village, where five fragments belonging to the High Medieval period (12th c.) were found.

CEMETERIES AND PROMINENT TOMBS

Only one cemetery is situated in the village of Kampyrtepa. It is named Kampyrtepa Ota (Uzb. "The father of Kampyrtepa") and 17 pottery fragments were found there (Bronze Age – one frag.; late 4th–5th c. AD – two frags.; High Medieval period (12th c.) – seven frags.; Pre-Modern period (18th–19th c.) – seven frags.).

Two central graves were noticed in Kampyrtepa. The first of them (KuPi_059; Kampyrtepa Ota) represents the central grave of the burial ground of the same name. The second one (KuPi_060; Boloq Ota – Uzb. "Father of the spring"), lies isolated at the northern margin of the village near a spring (KT_S01, Bosh Buloq), and none of the respondents remembered any connection of this place with a burial ground.

ZARABAG

The exhaustive information about the largest oasis of the studied area, Zarabag, which extends over an area of ca. 425 ha including its general information, water sources, morphological features etc. has been already published in the preliminary report for the season 2015 (Augustinová *et al.* 2015, 262–281), hence we summarize here only the newly gained data. All of the data (including also the features from the last season)[15] are summarized in the tables (**Tabs. 1** and **2**).

NEWLY DETECTED MORPHOLOGICAL FEATURES AND THE LOCATIONS WITH ARCHAEOLOGICAL EVIDENCE

A site with the local name Bobolangar (Uzb. "Old man's shadoof/well pole"; KuPi_008; POL_039; **Fig. 19**) located in the western part of the Zarabag village (998 m.a.s.l.), deserves the main attention. It is situated on the small spur of a descending dry stony ridge at the approximate distance of 120 m from the right bank of the seasonal river of Machayly. It is elevated 15 m above the spring of an identical name (ZA_S08 – Bobolangar). On the summit's surface, there are the clearly visible remains of the stone structures of the two basic shapes: rectangular and circular (d. ca. 1.5 m), preliminarily interpreted as graves. A ditch, perhaps a water canal, which is not used in the present day, skirts this small mound. There are two substantial terrain disruptions (on the north-west and south-east sides of the site), caused by clay digging. Most of the rich archaeological material comes from these two spots, but numerous ceramic fragments were also scattered on the surface of the site. Altogether 136 ceramic fragments were found – 50 sherds including one unique fragment of *dastarkhan* ("a ritual table", **Pl. 4/7**) belong to the Late Bronze Age (Sapalli Culture; **Figs. 20** and **21**). One fragment is dated to the

15 The category of the features and objects compared to the preliminary classifications of the previous season in Zarabag (Augustinová *et al.* 2015, 279–281) were reassessed under the newly gained data.

Early Iron Age (Yaz I Culture), six fragments belong to the Achaemenid period (5th–6th c. BC), and one fragment belongs to the High Medieval period (11th–12th c.). The most numerous finds belong to the Late Bronze Age and based on the good state of preservation of the finds (large parts of vessels preserved), this site may possibly be a burial ground.

Fig. 19: The view of the site of Bobolangar (KuPi_008) from the south-west (photo by A. Augustinová).

In close proximity – to the south-west of Bobolangar (KuPi_008), is situated a second site, nick-named Bobolangar-2 (KuPi_009; POL_104). It forms a flat promontory, its surface is again covered with stone rectangular structures, and as in the case of Bobolangar (KuPi_008), we interpret them as graves.

The third small ridge labelled Bobolangar-3 (KuPi_010; POL_107) lies in the neighbourhood of Bobolangar-2. A stone platform with a square ground plan (6×6 m) is the only feature on the top of this mound.

Bobolangar lies 1.4 km to the north of the site of Tulki Tepa (KuPi_011) detected by L. Stančo during his survey. The site probably belongs to the same period – the Bronze Age (Stančo *et al.* in preparation).

We also focused on the morphological features of likely anthropic origin in the landscape, although without sufficient archaeological material to date them. Nevertheless, it is also necessary to take note of them. Most of them were already mentioned in the previous preliminary report (Augustinová *et al.* 2015, 279–281). Two features situated 2.9 km to the south-east of the Zarabag Oasis in the direction of the village of Kayrit, that are very similar to (KuPi_025) were newly discovered. Both features that are attached to each other are formed by the remains of the stone walls of square ground plan (KuPi_043 – 9×9 m; KuPi_044 – 11×12 m).This place is already known from the prospection of L. Stančo as Kayrit XV (Stančo 2016, 83, Tab. 2); one fragment of pottery dated to the Medieval period was found there.

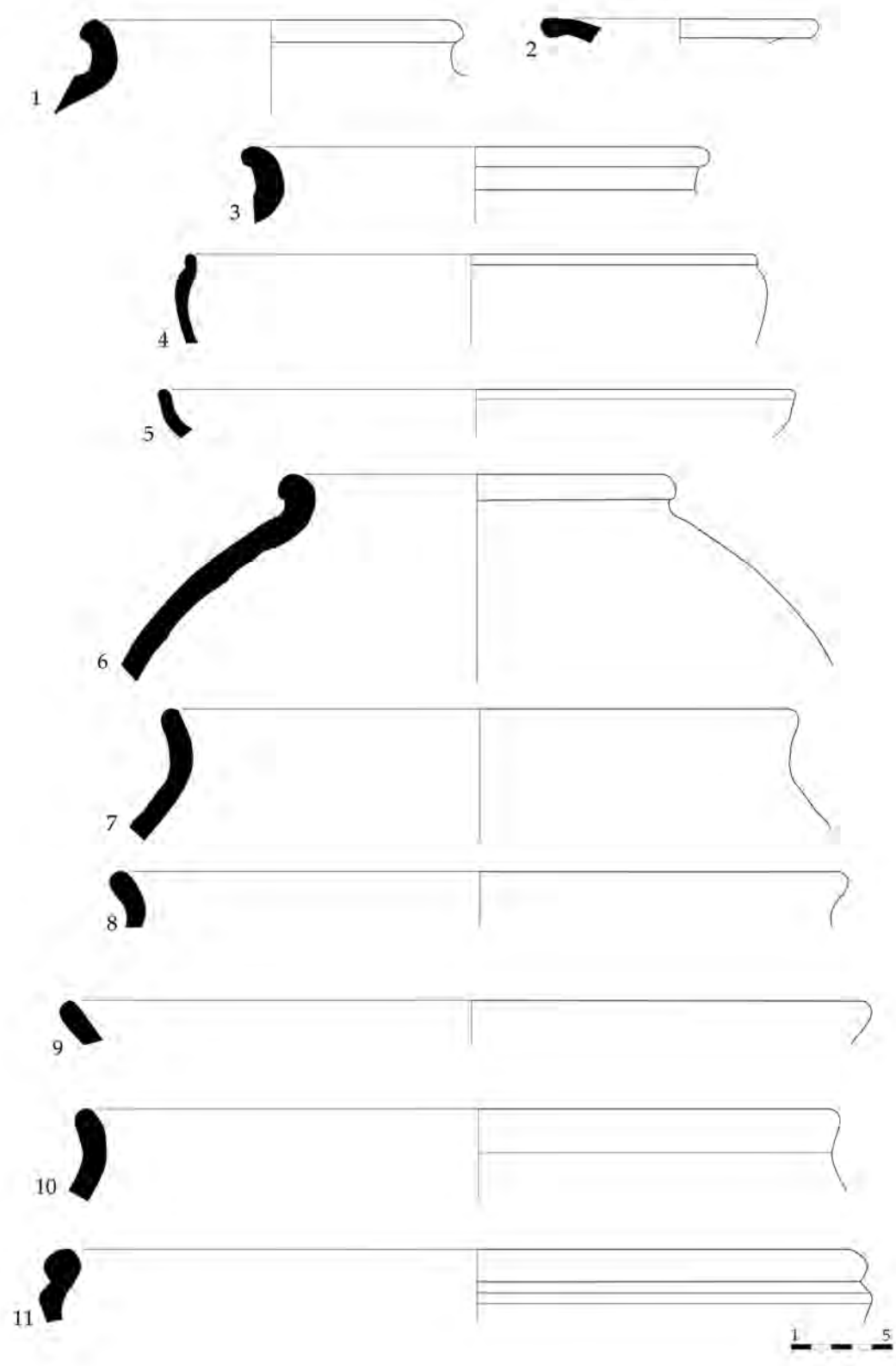


Fig. 20: Selected pottery from the surface survey in the Zarabag Oasis belonging to the Bronze Age site Bobolangar (KuPi_008); (drawing by L. Damašek and A. Augustinová).

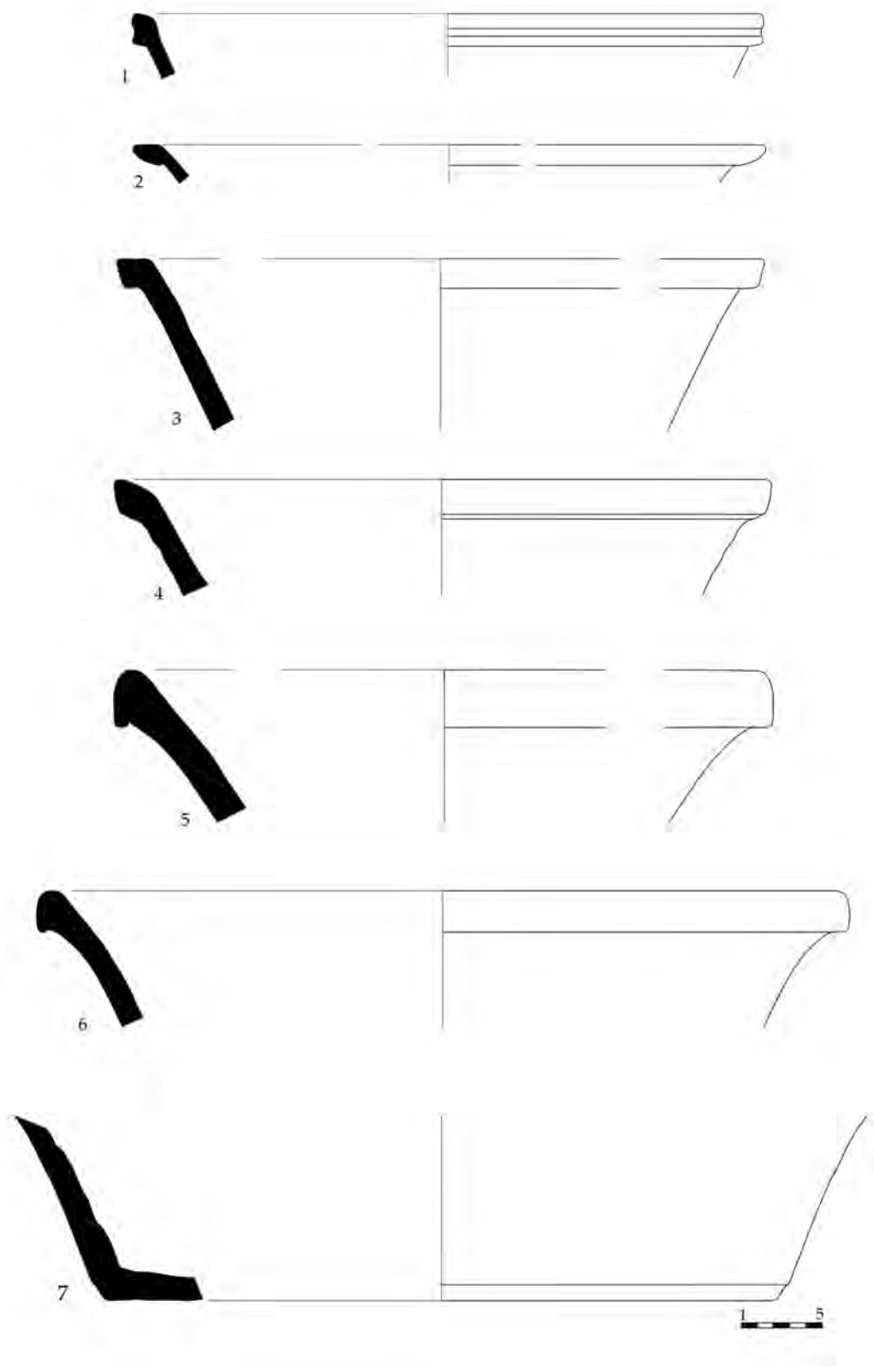


Fig. 21: Selected pottery from the surface survey in the Zarabag Oasis belonging to the Kushan Sassanian period (4th–5th c.). 1–3 and 5–7 POL_010; 4 POL_023 (drawing by L. Damašek and A. Augustinová).

FINDS FROM THE OASES AND THEIR VICINITY

During the surface survey in these three oases, a huge body of archaeological finds was collected, represented mostly by ceramic fragments. They allow us to establish the chronology of the settlement in the particular places. In all three oases, 2,367 ceramic fragments were collected altogether, and it was possible to date as many as 1,849 of them. Out of these, 1,377 pottery fragments (928 datable) come from the Zarabag Oasis, 842 fragments (781 datable) from the Karabag Oasis, and only 148 fragments (140 datable) from the oasis of Kampyrtepa.

Thanks to the implementation of a metal detector into the survey,[16] the find collection was enriched by metal artefacts including coins (altogether 34 coins from the oases of Zarabag and Karabag) which are planned to be published separately soon.

Among the finds an artefact found in the Shalkan Say (POL_106) in the south margin of the Zarabag village in a spot, where the Shalkan River leaves the Zarabag village stands out. The small granite mortar (**Pl. 4/8**) belongs chronologically most probably to the Iron Age (Yaz I culture). Based on the analogies we can assume that it served for the rituals practised in Zoroastrinism namely for the making of the potion *haoma* (Abdullaev 2009, 89). Apparently this mortar had been brought to its find place by the water of the Shalkan River from a site situated up stream. The potential place of origin could have been a place in the centre of the Zarabag Oasis (POL_003), where the scatter of the Early Iron Age finds was found. But it is also possible that there are other sites of the Yaz Culture close to the stream of Shalkan River, to the north of the Zarabag Oasis in the direction of the village of Shalkan. The indispensable part of the equipment used for the *haoma* making was the pestle as we can see in the collection of the finds e.g. on a nameless tepa in the Marshade (Pugachenkova – Rtveladze – Kato 1991, fig. 7, 8).

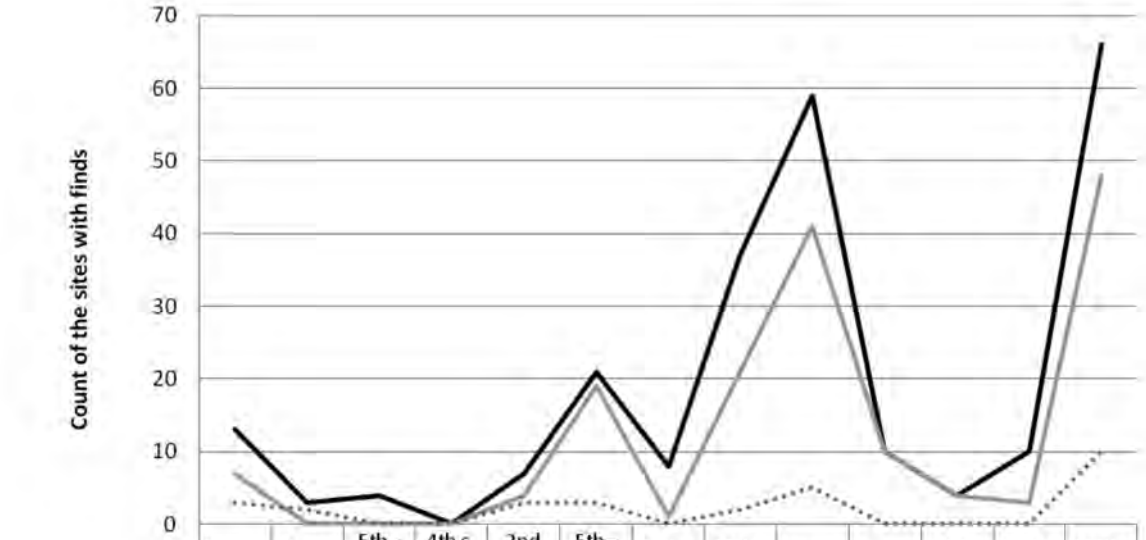
CONCLUSIONS

The large amount of archaeological material, especially pottery fragments, allows us to postulate some general characteristics of the settlement development of the oases in the northern Pashkhurt Basin and related processes. Statistically significant numbers of well-dated finds transformed into an absolute chronological framework show similar or almost identical tendencies and settlement dynamics in all three of the researched oases (**Fig. 22**).

The earliest settlement phase that is detected in each oasis belongs to the Late Bronze Age (Sapalli Culture). There are 23 places with finds belonging to this period detected during our surveys.

In Kampyrtepa, the concentration of the pottery fragments belonging to the Bronze Age was not high, nevertheless the ceramic fragments were found in three places – in the site of Eishntepa and in its close vicinity. In Karabag, the Bronze Age finds were detected in seven places and it is possible to distinguish three clusters of these findspots (or potential settlement-sites that have been disrupted by the later cultural impacts). The rest of the material was found in the Zarabag Oasis and its surroundings (13 spots with finds). There are three clusters in the area of the oasis of Zarabag plus the sites in its vicinity (Bobolangar – KuPi_008/POL_039, Tulkitepa – KuPi_011/POL_085, Koshtepa – KuPi_001/POL_023), and the concentration of the polygons with finds (POL_043, POL_113, POL_130) in the north-west of Zarabag.

16 The metal detector survey as well as the subsequent conservation and documentation of the finds were conducted by T. Smělý.



	Bronze Age	Iron Age	5th–6th c. BC	4th c. BC–1st c. AD	2nd c.–4th c. AD	5th–6th c. AD	7th–9th c.	10th–11th c.	12th c.	13th c.	14th–15th c.	16th–17th c.	18th–19th c.
Zarabag	13	3	4	0	7	21	8	37	59	10	4	10	66
Karabag	7	0	0	0	4	19	1	21	41	10	4	3	48
Kampyrtepa	3	2	0	0	3	3	0	2	5	0	0	0	10

Fig. 22: The settlement dynamic in the three researched oases in the Kugitang Piedmonts (Zarabag, Karabag and Kampyrtepa) during the specific periods.

The Iron Age (Yaz Culture) was detected only in the oases of Zarabag and Kampyrtepa. In Kampyrtepa, the fragments of pottery dated to the Early Iron Age (Yaz I Culture) were found on the site of Eishntepa (KuPi_056), in the oasis of Zarabag on the sites of Bobolangar (KuPi_008), Koshtepa-2 (KuPi_002), and on the plot in the centre of Zarabag (POL_003).

The settlement evidence and density of sites decreases in the following periods even more. We found only three places with material dated to the 5th–6th c. BC and they were, moreover, encountered only in the Zarabag Oasis (represented by only 11 frags. of pottery). Unlike the Sherabad Oasis, piedmont steppe does not seem to be intensely settled during the Achaemenid period.

A substantial change occurred at the end of the Iron Age. From the beginning of the 4th c. BC on, until the end of the 1st c. AD there is no archaeological evidence of human activities in the researched area. A probable explanation for this gap is connected with the military campaign of the Greco-Macedonian armies under Alexander the Great, whose operations led to the abandonment of many settlements of the whole Surkhan Darya Valley and ensuing depopulation of the entire region (Stančo – Tušlová eds., in print, chapter 5.4).

The population growth and exploitation of the area starts again only in the 2nd c. AD; there are 14 places detected with finds dating to the period between the 2nd and 4th c. AD. In Kampyrtepa, the finds are concentrated in three places in the vicinity of the Eishntepa as was the case with the Bronze Age finds. In Karabag, ceramic fragments dated to these centuries were found in four places spread out across the whole area of the oasis, while in the Zarabag Oasis seven places were detected.

In the Early Medieval period human activities increased even more significantly, as shown by the available material evidence. There are 43 places with finds of the 5th–6th c. AD, and nine

places with finds belonging to the 7th–9th c. (although none in Kampyrtepa and only one in Karabag).

The quantity of finds significantly grows with material of the High Medieval period. The 10th–12th c. is represented by 60 places with archaeological material belonging to the 10th–11th c. and 104 places dated to the 12th c.; in this period the settlement was detected not only in the area of the present-day oases themselves, but also in their surroundings.

This settlement heyday was followed by a strong decrease in the 13th c. with archaeological evidence in 13 places (none in Kampyrtepa and only three in Karabag), and this fall and stagnation continued in the following centuries. There is almost no settlement evidence in the High Medieval period of the 14th–15th c. which is represented by six places with finds, but the pottery fragments belonging to this period are represented only by three fragments from the Karabag Oasis and two fragments from the Zarabag Oasis. The rest of the finds consist of 16 coins from Zarabag, and three coins from Karabag. Again, the well-known historical events of the early 13th c. could help to explain our data on this period: during or after the Mongol invasion many settlements of the broader region were abandoned and the area did not recover from this disaster for many centuries (Stančo – Tušlová eds. in print, chapters 5.7 and 5.8).

The evidence of human activities connected with the settlement slightly increases again in the Late Medieval period (16th–17th c.), since 13 find places with ceramic fragments dated to this phase were found here (but none of them in Kampyrtepa).

The Pre-modern period is represented most plentifully, more precisely by as many as 124 places with finds in all three oases. Note, however, that in comparison with the settlement evidence of the High Middle Ages, the number is quite similar.

A comparison of the data from the individual oases shows remarkable characteristics, among them obvious a similarity between the "small tepa" sites in each of the oases: in Zarabag it is the nameless tepa: KuPi_013; in Karabag Kush-Vakttepa: KuPi_051; and in Kampyrtepa the site of Eishntepa: KuPi_056. All of these three sites have a similar shape of a small but significantly elevated tepa: they are of 3–5 m higher than the surrounding terrain with a diameter of ca. 40–50 m. They all produced ceramic fragments belonging to the Late Bronze Age, Early Medieval period (4th–6th c.), and to the High Medieval period (12th c.) confirming perfectly the three heyday phases of the local settlement history in the northern Pashkhurt Basin.

This report summarizes the data gained in summer 2016 during the second survey season and presents its basic evaluation. The research in the oases in the piedmonts of the Kugitang Mountains will be continuing in the forthcoming season – summer 2017. The complete analyses and evaluation of the data will be presented at the end of the project.

ACKNOWLEDGMENTS

This paper was written within the project "Settlement dynamics of the steppe zone in the foothills of Kugitang (South Uzbekistan) no. 250227/ 2016–2017" undertaken at Charles University, Faculty of Arts from the Specific university research of GAUK (Grant Agency of Charles University).

Polygon No.	Coordinates		Village	Type of survey area	Quantity of finds (dated)	Type of finds	Bronze Age	Early Iron Age (Yaz I)	Middle and Late Iron Age (Yaz II/Yaz III)	6th–5th c. BC	2nd–4th c. AD	5th–6th c. AD	7th–9th c. AD	10th–11th c. AD	12th c. AD	13th c. AD	14th–15th c. AD	16th–17th c. AD	18th–19th c. AD
POL_001	66.725989245	37.771942159	Zarabag	garden	6 (4)	pottery													2
POL_002	66.727053327	37.771755494	Zarabag	garden	3 (2)	pottery									1	1			1
POL_003	66.745201992	37.767603351	Zarabag	garden	20 (16)	pottery (incl. a whole vessel), mortar and pestle		2					2		2			6	1
POL_004	66.746023502	37.768300222	Zarabag	garden	20 (18)	pottery						3	3		5			5	5
POL_005	66.74716034	37.766103661	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)									1				
POL_006	66.748128533	37.767205378	Zarabag	garden	35 (23)	pottery						1	4	15	4				3
POL_007	66.753392955	37.765495218	Zarabag	field	15 (9)	pottery						2			2			3	5
POL_008	66.752283862	37.765591945	Zarabag	orchard	8 (1)	pottery, coin (1)									1				
POL_009	66.748350905	37.767399084	Zarabag	garden	10 (4)	pottery, statue						2		2					
POL_010	66.747013237	37.767706029	Zarabag	garden	57 (44)	pottery, otchak, glass					8	6	6	2	9	1	0	5	8
POL_011	66.741902623	37.770857541	Zarabag	garden	10 (8)	pottery										1		5	7
POL_012	66.731450139	37.77085511	Zarabag	garden	8 (2)	pottery							2	2					
POL_013	66.731677372	37.77109718	Zarabag	field	39 (22)	pottery, coins (18)				4		3		2			12 COI		1
POL_014	66.735798335	37.771119727	Zarabag	orchard	4 (0)	pottery							1						
POL_015	66.742428588	37.770107528	Zarabag	garden	1 (1)	whole vessel													1
POL_016	66.754812934	37.762353849	Zarabag	garden	1 (1)	whole vessel													1
POL_017	66.745691411	37.767108735	Zarabag	garden	5 (2)	pottery										2			
POL_018	66.728599	37.771117	Zarabag	field	6 (6)	pottery, metal													
POL_019	66.722802	37.770939	Zarabag	find	1 (0)	pottery													

POL_020	66.756462	37.762807	Zarabag	field	12 (6)	pottery						1	1	1	2				1
POL_021	66.742341	37.778551	Zarabag	find	12 (1)	pottery									1				
POL_022	66.739876	37.773059	Zarabag	find	2 (2)	pottery													2
POL_023	66.762924	37.745028	Zarabag	tepa	29 (17)	pottery	4				1								11
POL_024	66.763080	37.745475	Zarabag	find	14 (10)	pottery			5			1	1		1	1			2
POL_025	66.754124	37.763804	Zarabag	find	8(8)	pottery	5								2				
POL_026	66.750534	37.768537	Zarabag	field	10 (3)	pottery									3				
POL_027	66.749028	37.785671	Zarabag	find	1 (1)	pottery									1				
POL_028	66.732368	37.773156	Zarabag	field	2 (0)	pottery													
POL_029	66.758312	37.766751	Zarabag	find	1 (1)	pottery									1				
POL_030	66.756589	37.770667	Zarabag	find	3 (3)	pottery													
POL_031	66.751994	37.754979	Zarabag	find	1 (1)	pottery													1
POL_032	66.751320	37.755325	Zarabag	garden	2 (2)	pottery						2							
POL_033	66.745403	37.758901	Zarabag	garden	1 (0)	pottery													
POL_034	66.749441	37.756509	Zarabag	field	6 (6)	pottery									5			1	
POL_035	66.749810	37.759538	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)													1
POL_036	66.750783	37.759080	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)						1							
POL_037	66.740246	37.769137	Zarabag	garden	7 (7)	pottery									7				
POL_038	66.740175	37.771251	Zarabag	find	6 (6)	pottery									5	5			
POL_039	66.740390	37.762070	Zarabag	site	68 (62)	pottery, *dastarkhan*	51	1		6				1	1				2
POL_040	66.731880	37.765841	Zarabag	field	10 (10)	pottery									10				
POL_041	66.731648	37.765263	Zarabag	field	15 (2)	pottery											2		
POL_042	66.721221	37.769329	Zarabag	find	4 (4)	pottery						2			1				1
POL_043	66.719005	37.769516	Zarabag	feature	4 (4)	pottery	3											1	

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POL_044	66.725104	37.770460	Zarabag	garden	2 (2)	pottery									2				
POL_045	66.726812	37.769943	Zarabag	garden	1 (1)	pottery				1									
POL_046	66.744441	37.765765	Zarabag	garden	10 (10)	pottery								2	2				6
POL_047	66.728004	37.769434	Zarabag	garden	2 (1)	pottery													1
POL_048	66.727746	37.769121	Zarabag	garden	2 (2)	coins (2)											2 COI		
POL_049	66.722482	37.770025	Zarabag	field	11 (11)	pottery													11
POL_050	66.731197	37.765656	Zarabag	field	3 (1)	pottery													1
POL_051	66.748582	37.761818	Zarabag	garden	2 (0)	pottery													
POL_052	66.733563	37.768290	Zarabag	field	5 (2)	pottery								1					1
POL_053	66.732420	37.768933	Zarabag	find	6 (6)	pottery								1					5
POL_054	66.730693	37.771039	Zarabag	garden	1 (1)	pottery									1	1			
POL_055	66.747946	37.761476	Zarabag	garden	4 (4)	pottery						1		3					
POL_056	66.748850	37.761097	Zarabag	garden	28 (24)	pottery									2				22
POL_057	66.749126	37.761551	Zarabag	garden	19 (19)	pottery								5	5				14
POL_058	66.748089	37.762125	Zarabag	garden	3 (3)	pottery													3
POL_059	66.749533	37.761346	Zarabag	garden	20 (6)	pottery									3				3
POL_060	66.749539	37.760575	Zarabag	garden	18 (13)	pottery, tube									5				8
POL_061	66.749496	37.760851	Zarabag	garden	64 (61)	pottery								17	4	4		1	36
POL_062	66.749329	37.761136	Zarabag	garden	16 (16)	pottery								2					14

POL_063	66.750192	37.760636	Zarabag	garden	11 (11)	pottery									1				10
POL_064	66.752362	37.760458	Zarabag	garden	9 (6)	pottery									1				5
POL_065	66.750618	37.761188	Zarabag	garden	6 (2)	pottery								2					
POL_066	66.753888	37.762503	Zarabag	garden	17 (17)	pottery								17					
POL_067	66.747614	37.764893	Zarabag	garden	23 (23)	pottery								4					19
POL_068	66.752110	37.762648	Zarabag	garden	8 (8)	pottery	1							1	1				5
POL_069	66.751107	37.762133	Zarabag	garden	11 (4)	pottery (incl. a whole vessel)								4					
POL_070	66.750522	37.763015	Zarabag	garden	1 (1)	pottery								1					
POL_071	66.751648	37.762263	Zarabag	garden	28 (28)	pottery									9				17
POL_072	66.748104	37.765379	Zarabag	garden	3 (3)	pottery								1					2
POL_073	66.747300	37.765668	Zarabag	garden	8 (8)	pottery													8
POL_074	66.746365	37.765771	Zarabag	garden	17 (17)	pottery (incl. a whole vessel)						2		1	1				13
POL_075	66.746575	37.765108	Zarabag	garden	18 (0)	pottery													
POL_076	66.745371	37.765600	Zarabag	garden	8 (0)	pottery													
POL_077	66.745750	37.764481	Zarabag	garden	8 (6)	pottery									1				5
POL_078	66.744489	37.764616	Zarabag	garden	5 (5)	pottery								2	2				3
POL_079	66.744668	37.765272	Zarabag	garden	8 (2)	pottery (incl. a whole vessel)						1							
POL_080	66.743371	37.766169	Zarabag	find	4 (4)	pottery								4					
POL_081	66.743584	37.766372	Zarabag	garden	4 (4)	pottery								2	2				2
POL_082	66.744291	37.767512	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)					1								
POL_083	66.744030	37.767822	Zarabag	garden	1 (1)	pottery						1							
POL_084	66.744992	37.768245	Zarabag	garden	27 (21)	pottery								9					12
POL_085	66.749430	37.751390	Zarabag	site	45 (38)	pottery, grinding slab	20								14				4

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POL_086	66.728653	37.770459	Zarabag	garden	1 (1)	pottery													1
POL_087	66.729374	37.770409	Zarabag	garden	5 (5)	pottery								2	1				2
POL_088	66.730370	37.770606	Zarabag	garden	4 (3)	pottery, coins (2)													3
POL_089	66.751278	37.753183	Zarabag	find	3 (2)	pottery									2				
POL_090	66.753196	37.748232	Zarabag	find	4 (4)	pottery									4				
POL_091	66.735557	37.769897	Zarabag	garden	3 (3)	pottery						1			1				1
POL_092	66.734527	37.769627	Zarabag	field	28 (15)	pottery								3	5				6
POL_093	66.735429	37.770692	Zarabag	field	14 (14)	pottery								1	11				2
POL_094	66.737859	37.770553	Zarabag	find	4 (4)	pottery						1							3
POL_095	66.737696	37.769793	Zarabag	garden	6 (6)	pottery									3				3
POL_096	66.738313	37.767388	Zarabag	garden	4 (0)	pottery													
POL_097	66.737868	37.768324	Zarabag	find	7 (0)	pottery								2	2			1	4
POL_098	66.737961	37.768941	Zarabag	garden	2 (1)	pottery													1
POL_099	66.741532	37.766962	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)												1	
POL_100	66.747030	37.759288	Zarabag	garden	2 (1)	pottery (incl. a whole vessel)									1				
POL_101	66.748720	37.759628	Zarabag	garden	2 (2)	pottery								2					
POL_102	66.747853	37.767764	Zarabag	garden	1 (1)	pottery													
POL_103	66.724295	37.770315	Zarabag	garden	3 (0)	pottery													
POL_104	66.741699	37.761463	Zarabag	site	13 (1)	pottery													1

POL_105	66.740615	37.763279	Zarabag	garden	2 (2)	coins											2 COI		
POL_106	66.746537	37.762141	Zarabag	find	1 (1)	pottery			1										
POL_107	66.742412	37.760477	Zarabag	find	1 (1)	pottery, mortar	1												
POL_108	66.744283754	37.76789437	Zarabag	site	8 (8)	pottery (incl. a whole vessel)	1				2	2							
POL_109	66.782624004	37.760404386	Zarabag	feature	5 (5)	pottery									3				2
POL_110	66.727590	37.766656	Zarabag	prospection	8 (8)	pottery									8				
POL_111	66.727747	37.767064	Zarabag	prospection	5 (5)	pottery									1				4
POL_112	66.719612	37.768718	Zarabag	prospection	47 (46)	pottery, metal								20	20	5			18
POL_113	66.718023	37.771348	Zarabag	prospection	11 (10)	pottery	1					3			1				5
POL_114	66.723412	37.768283	Zarabag	prospection	17 (11)	pottery					1			2	8				
POL_115	66.729274	37.771178	Zarabag	garden	1 (1)	pottery (incl. a whole vessel)													1
POL_116	66.739236000	37.773225000	Zarabag	burial ground	10 (9)	pottery					1			3					3
POL_117	66.75143335	37.769979453	Zarabag	burial ground	1 (0)	pottery													
POL_118	66.741550667	37.767572924	Zarabag	burial ground	5 (0)	pottery													
POL_119	66.751185581	37.765816748	Zarabag	burial ground	15 (2)	pottery, seal				0		2							
POL_120	66.727887494	37.771865381	Zarabag	burial ground	1 (0)	pottery													
POL_121	66.755450	37.770472	Zarabag	find	1 (1)	pottery					1								
POL_122	66.719599	37.772364	Zarabag	prospection	4 (4)	pottery										4			
POL_123	66.772691	37.775465	Zarabag	prospection	1 (1)	pottery									1				

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POL_124	66.775816	37.775310	Zarabag	prospection	8 (8)	pottery									8				
POL_125	66.781609	37.767033	Zarabag	prospection	2 (2)	pottery	1												1
POL_126	66.745494	37.751955	Zarabag	prospection	2 (2)	pottery									2				
POL_127	66.745264	37.782661	Zarabag	prospection	1 (0)	pottery													
POL_128	66.709616	37.771457	Zarabag	prospection	4 (4)	pottery													4
POL_129	66.719749	37.771424	Zarabag	prospection	19 (19)	pottery								4					15
POL_130	66.718653	37.770352	Zarabag	prospection	21 (20)	pottery, coin (1)	3							10					7
POL_131	66.741694	37.753300	Zarabag	prospection	3 (3)	pottery									3				
POL_132	66.742823	37.752144	Zarabag	prospection	2 (2)	pottery									2				
POL_133	66.744738	37.752079	Zarabag	prospection	1 (1)	pottery													1
POL_134	66.761494	37.763052	Zarabag	prospection	10 (3)	pottery	1							2					
POL_135	66.754049	37.751747	Zarabag	prospection	4 (3)	pottery													3
POL_136	66.80795	37.77223	Karabag	find	1 (1)	pottery													1
POL_137	66.80795	37.77223	Karabag	garden	3 (2)	pottery, coins (3)									2		1 COI		1 COI

POL_138	66.80653	37.77064	Karabag	find	37 (37)	pottery	1							1	2		1	1	32
POL_139	66.80934	37.77144	Karabag	tepa	43 (29)	pottery	1				1	18	3	3					8
POL_140	66.81008	37.77223	Karabag	field	55 (20)	pottery						1		3	1	1	2		11
POL_141	66.80069	37.76954	Karabag	tepa	4 (4)	pottery								1					3
POL_142	66.80577	37.77069	Karabag	burial ground	92 (91)	pottery	2					7		62	16	1			26
POL_143	66.80221	37.77587	Karabag	tepa	11 (11)	pottery									4				7
POL_144	66.80192	37.77401	Karabag	tepa	3 (0)	pottery								3					
POL_145	66.80226	37.77319	Karabag	tepa	59 (57)	pottery					2	12			14				31
POL_146	66.80330	37.77350	Karabag	pole	11 (11)	pottery								3	3				8
POL_147	66.80670	37.77041	Karabag	garden	31 (31)	pottery (incl. a whole vessel), coins (3)						1		2		1	2		28
POL_148	66.80735	37.77078	Karabag	garden	25 (24)	pottery								17	1	2			4
POL_149	66.80669	37.77130	Karabag	find	9 (9)	pottery						3		1	2				3
POL_150	66.80718	37.77124	Karabag	garden	11 (11)	pottery									4				7
POL_151	66.80714	37.77173	Karabag	garden	14 (14)	pottery									5				9
POL_152	66.80747	37.77222	Karabag	garden	1 (1)	potter (incl. a whole vessel)									1				
POL_153	66.80782	37.77189	Karabag	find	5 (5)	pottery									4				1
POL_154	66.80902	37.77321	Karabag	garden	2 (2)	pottery								2					
POL_155	66.81886	37.75439	Karabag / Kayrit	field	2 (0)	pottery									2				
POL_156	66.80706	37.78148	Karabag	garden	1 (1)	pottery									1				
POL_157	66.80436	37.78039	Karabag	garden	3 (3)	pottery									2				1
POL_158	66.80705	37.77695	Karabag	garden	2 (2)	pottery									2				
POL_159	66.80570	37.77628	Karabag	garden	28 (28)	pottery						8			2			13	5
POL_160	66.80963	37.77106	Karabag	garden	23 (22)	pottery						4			5				13

Polygon No.	Coordinates		Village	Type of survey area	Quantity of finds (dated)	Type of finds	Bronze Age	Early Iron Age (Yaz I)	Middle and Late Iron Age (Yaz II/Yaz III)	6th–5th c. BC	2nd–4th c. AD	5th–6th c. AD	7th–9th c. AD	10th–11th c. AD	12th c. AD	13th c. AD	14th–15th c. AD	16th–17th c. AD	18th–19th c. AD
POL_161	66.81022	37.77121	Karabag	garden	13 (9)	pottery	4					3							2
POL_162	66.81072	37.77086	Karabag	garden	2 (2)	pottery						1							1
POL_163	66.81052	37.77052	Karabag	garden	12 (2)	pottery									2				
POL_164	66.81096	37.76490	Karabag	garden	15 (15	pottery						1		9	2				3
POL_165	66.80995	37.76503	Karabag	garden	2 (2)	pottery						1							1
POL_166	66.80854	37.77507	Karabag	garden	7 (7)	pottery								2	2				4
POL_167	66.80808	37.77608	Karabag	garden	2 (1)	pottery								1					
POL_168	66.81383	37.76795	Karabag	garden	2 (2)	pottery								1					1
POL_169	66.80612	37.77266	Karabag	find	13 (13)	pottery								1	4				6
POL_170	66.80652	37.77277	Karabag	garden	45 (43)	pottery	2					5			4				32
POL_171	66.80595	37.77324	Karabag	garden	3 (3)	pottery									3				
POL_172	66.80031	37.77954	Karabag	garden	3 (3)	pottery						1			2				
POL_173	66.81301	37.76976	Karabag	garden	10 (10)	pottery								2	2				8
POL_174	66.80689	37.77351	Karabag	garden	12 (10)	pottery						3						1	6
POL_175	66.80180	37.78589	Karabag	field	31 (27)	pottery						3			11				13
POL_176	66.80796	37.77157	Karabag	garden	16 (16)	pottery									9				6
POL_177	66.81067	37.76531	Karabag	garden	24 (24)	pottery					1	1			5				18
POL_178	66.81040	37.76570	Karabag	garden	13 (13)	pottery								2	2				11
POL_179	66.81009	37.76608	Karabag	garden	3 (2)	pottery								2					

POL_180	66.80847	37.76729	Karabag	garden	3 (3)	pottery									1				2
POL_181	66.80770	37.76767	Karabag	garden	1 (1)	pottery													1
POL_182	66.80953	37.76837	Karabag	garden	38 (31)	pottery									25				6
POL_183	66.80616	37.76840	Karabag	garden	14 (11)	pottery					1				9				1
POL_184	66.80691	37.76966	Karabag	garden	18 (18)	pottery	2					1		2	8				5
POL_185	66.80684	37.77576	Karabag	garden	5 (0)	pottery									1				4
POL_186	66.80626	37.77485	Karabag	garden	10 (0)	pottery									10				
POL_187	66.80573	37.77396	Karabag	garden	12 (12)	pottery									1				11
POL_188	66.80072	37.78043	Karabag	garden	3 (0)	pottery													3
POL_189	66.81448	37.76600	Karabag	field	4 (4)	pottery													4
POL_190	66.81342	37.76839	Karabag	garden	17 (7)	pottery									7				
POL_191	66.81368	37.76716	Karabag	garden	10 (10)	pottery	3												7
POL_192	66.81508	37.76641	Karabag	garden	16 (14)	pottery								7	4				3
POL_192	66.80199	37.77725	Karabag	garden	7 (7)	potter (incl. a whole vessel)													7
POL_193	66.80106	37.77760	Karabag	garden	1 (1)	pottery													1
POL_194	66.80864	37.77243	Karabag	garden	6 (5)	pottery													5
POL_195	66.78940	37.81609	Karabag	prospection	1 (0)	pottery													
POL_196	66.78569	37.75715	Karabag	prospection	4 (3)	pottery						3							
POL_197	66.66515	37.78853	Kampyr-tepa	tepa	17 (17)	pottery								4	5				8
POL_198	66.68070	37.78316	Kampyr-tepa	garden	6 (2)	pottery													2
POL_199	66.67882	37.78327	Kampyr-tepa	find	6 (6)	pottery									2				4
POL_200	66.67813	37.78347	Kampyr-tepa	garden	2 (0)	pottery													

Polygon No.	Coordinates		Village	Type of survey area	Quantity of finds (dated)	Type of finds	Bronze Age	Early Iron Age (Yaz I)	Middle and Late Iron Age (Yaz II/Yaz III)	6th–5th c. BC	2nd–4th c. AD	5th–6th c. AD	7th–9th c. AD	10th–11th c. AD	12th c. AD	13th c. AD	14th–15th c. AD	16th–17th c. AD	18th–19th c. AD
POL_201	66.67631	37.78364	Kampyr-tepa	tepa	58 (58)	pottery	1				6	3		7	19				22
POL_202	66.67699	37.78360	Kampyr-tepa	garden	27 (26)	pottery	2	6			5	4							13
POL_203	66.67701	37.78501	Kampyr-tepa	burial ground	17 (17)	pottery	1				2	2			7				7
POL_204	66.69305	37.77790	Kampyr-tepa	tepa	3 (3)	pottery													2
POL_205	66.69102	37.78021	Kampyr-tepa	garden	2 (2)	pottery													2
POL_206	66.69812	37.77950	Kampyr-tepa	garden	5 (5)	pottery									3				2
POL_207	66.69325	37.77966	Kampyr-tepa	garden	3 (3)	pottery													3
POL_208	66.80672	37.76881	Karabag	garden	2 (2)	pottery									2				

Tab. 1: The surveyed polygons with finds (POL_001–208) in the oases of Zarabag, Karabag and Kampyrtepa.

Code	Local Name	Village	Coordinates		Quantity of finds (dated)	Type of feature	Type of finds	Dating (quantity)	Polygon No.
KuPi_001	Koshtepa	Zarabag	66.76292452	37.745028036	28 (16)	tepa	pottery	Sapalli (Late Bronze Age) (5), 4th c. (1), 18th/19th c. (2), 18th/19th c. mountain area (7)	POL_023
KuPi_002	Koshtepa-2	Zarabag	66.763079921	37.745474959	15 (9)	surface disruption	pottery	Yaz II/III (Early Iron Age) (5), 5th–6th c. (1), 12th–13th c. (1), 18th/19th c. (1), 18th/19th c. mountain area (1)	POL_024
KuPi_003	Karaultepa	Zarabag	66.749028163	37.785670459	0 (0)	×	×	×	NEG_027
KuPi_004	×	Zarabag	66.782624004	37.760404386	5 (5)	tepa	pottery	12th c. (3), 18th–19th c. (2)	POL_109
KuPi_005	Dülanatepa	Zarabag	66.729326751	37.776512057	0 (0)	tepa	×	×	NEG_028
KuPi_006	Vayorona/Erona	Zarabag	66.731507471	37.775841756	0 (0)	tepa	×	×	NEG_029
KuPi_007	×	Zarabag	66.732156565	37.774467794	0 (0)	tepa	×	×	NEG_030
KuPi_008	Bobolangar	Zarabag	66.740390000	37.762070000	68 (62)	burial ground/ tepa?	*dastarkhan*, poterry	Bronze Age (29), Sapalli (Late Bronze Age) (22), Yaz I (Early Iron Age) (1), 5th–6th c. (6), 11th–12th c. (1), 18th–19th c. (2)	POL_039
KuPi_009	Bobolanger-2	Zarabag	66.741699000	37.761463000	13 (1)	burial ground	pottery	18th–19th c. (1)	POL_104
KuPi_010	Bobolangar-3	Zarabag	66.742412000	37.760477000	1 (0)	unspecified feature	pottery	×	POL_107
KuPi_011	Tulkitepa	Zarabag	66.749430000	37.751390000	45 (37)	tepa	grinding slab, pottery	Sapalli (Late Bronze Age) (20), 12th c. (14), 18th–19th c. (4)	POL_085
KuPi_012	×	Zarabag	66.719005000	37.769516000	4 (4)	bank-like feature	pottery	Sapalli (Late Bronze Age) (3), 17th c. (1)	POL_043
KuPi_013	×	Zarabag	66.744283754	37.76789437	10 (6)	burial ground	pottery (incl. a whole vessel)	Sapalli (Late Bronze Age) (1), 4th c. (2), 5th–6th c. (2+1 vessel)	POL_108
KuPi_014	Kurukhsay Tepa	Zarabag	66.755105043	37.768986532	1 (0)	tepa	pottery	×	NEG_024
KuPi_015	×	Zarabag	66.780619000	37.759905000	0 (0)	semicircular feature	×	×	NEG_032
KuPi_016	Vayorona/Erona	Zarabag	66.733624237	37.774059512	0 (0)	bank-like feature	×	×	×
KuPi_017	×	Zarabag	66.722983075	37.771041356	0 (0)	kurgan	×	×	×
KuPi_018	×	Zarabag	66.722920043	37.770967344	0 (0)	kurgan	×	×	×
KuPi_019	×	Zarabag	66.722775958	37.771029454	1 (0)	kurgan	×	×	POL_019
KuPi_020	×	Zarabag	66.723324805	37.770915627	0 (0)	kurgan	×	×	×
KuPi_021	×	Zarabag	66.745264018	37.782661607	0 (0)	pit unclear origin	×	×	NEG_31

KuPi_022	×	Zarabag	66.785837626	37.759176102	1 (1)	pit unclear origin	pottery	12th c.	POL_27
KuPi_023	×	Zarabag	66.742863000	37.781070000	0 (0)	pit unclear origin	×	×	×
KuPi_024	×	Zarabag	66.746750800	37.782275453	0 (0)	mound feature	×	×	×
KuPi_025	×	Zarabag	66.771625774	37.760569761	0 (0)	square feature	×	×	×
KuPi_026	×	Zarabag	66.745264018	37.782661607	0 (0)	circular feature	×	×	×
KuPi_027	×	Zarabag	66.719544819	37.776658488	0 (0)	circular feature	×	×	×
KuPi_028	×	Zarabag	66.719498383	37.776764939	0 (0)	circular feature	×	×	×
KuPi_029	×	Zarabag	66.719691753	37.776798634	0 (0)	circular feature	×	×	×
KuPi_030	×	Zarabag	66.758239120	37.766691819	1 (0)	revision – Zarabag I–II	pottery	×	×
KuPi_031	×	Zarabag	66.756735000	37.770556000	4 (0)	revision – Zarabag IV	pottery	×	×
KuPi_032	×	Zarabag	66.778016000	37.755062000	0 (0)	revision – Zarabag III	×	×	×
KuPi_033	Yakadarakh	Zarabag	66.707258000	37.796702000	0 (0)	bank-like feature	×	×	×
KuPi_034	×	Zarabag	66.723389000	37.787848000	0 (0)	kurgan	×	×	×
KuPi_035	×	Zarabag	66.723325000	37.787866000	0 (0)	kurgan	×	×	×
KuPi_036	×	Zarabag	66.723349000	37.787942000	0 (0)	kurgan	×	×	×
KuPi_037	×	Zarabag	66.725374000	37.787689000	0 (0)	kurgan	×	×	×
KuPi_038	×	Zarabag	66.725318000	37.787712000	0 (0)	kurgan	×	×	×
KuPi_039	×	Zarabag	66.725533000	37.787896000	0 (0)	kurgan	×	×	×
KuPi_040	×	Zarabag	66.733761365	37.773950715	0 (0)	kurgan	×	×	×
KuPi_041	×	Zarabag	66.732595610	37.775445711	0 (0)	kurgan	×	×	×
KuPi_042	×	Zarabag	66.732667862	37.775363149	0 (0)	kurgan	×	×	×
KuPi_043	×	Zarabag	66.786729000	37.748623000	0 (0)	square feature	×	×	×
KuPi_044	×	Zarabag	66.787082000	37.748607000	0 (0)	square feature	×	×	×
KuPi_045	Bakhodin Balogardon	Karabag	66.811264000	37.771758000	0 (0)	kurgan	×	×	NEG_057
KuPi_046	×	Karabag	66.810009000	37.765056000	2 (2)	tepa	pottery	5th–6th c. (1), 18th–19th c. (1)	POL_165
KuPi_047	Bilgardon	Karabag	66.802163000	37.775873000	11 (11)	tepa	pottery	12th c. (4), 18th–19th c. (7)	POL_143
KuPi_048	×	Karabag	66.801995000	37.774390000	3 (3)	tepa	pottery	10th c. (3)	POL_144

Code	Local Name	Village	Coordinates		Quantity of finds (dated)	Type of feature	Type of finds	Dating (quantity)	Polygon No.
KuPi_049	Daurontepa	Karabag	66.802298000	37.773175000	59 (57)	tepa	pottery	4th c. (2), 5th–6th c. (12), 12th c. (14), 18th–19th c. (31)	POL_145
KuPi_050	×	Karabag	66.800850000	37.769479000	4 (4)	tepa	pottery	11th c. (1), 18th–19th c. (3)	POL_141
KuPi_051	Khush-Vakttepa	Karabag	66.809364000	37.771421000	43 (29)	tepa	pottery	Bronze Age (1), 4th c. (1), 5th c. (12), 5th–6th c. (3), 7th c. (3), 11th c. (3), 18th–19th c. (3)	POL_139
KuPi_052	Roy Bobo	Karabag	66.808567000	37.767565000	0 (0)	prominent tomb	×	×	×
KuPi_053	Jalavli Ota / Jalovle Mozor Bobo	Karabag	66.803331000	37.783570000	0 (0)	prominent tomb	×	×	NEG_055
KuPi_054	Khodzhulmat Yasaul	Karabag	66.801963000	37.768961000	0 (0)	prominent tomb	×	×	×
KuPi_055	Kurgan Tepa	Karabag	66.805770000	37.770716000	92 (91)	still used cemetery	pottery	Late Bronze Age (2), 5th–6th c. (7), 10th–12th c. (55), 12th–13th c. (1), 18th–19th c. (26)	POL_142
KuPi_056	Eishntepa	Kampyr-tepa	66.676363000	37.783674000	58 (58)	tepa	pottery	Bronze Age (1), 2nd–3rd c. (4), 4th c. (2), 5th c. (1),5th–6th c. (2), 10th c. (7), 12th c. (19), 18th–19th c.(22)	POL_201
KuPi_057	Oladüsttepa	Kampyr-tepa	66.665135000	37.788564000	17 (17)	tepa	pottery	10th c. (4), 12th c. (5), 18th–19th c. (8)	POL_197
KuPi_058	Seyidtepa	Kampyr-tepa	66.693030000	37.777872000	3 (3)	tepa	pottery	18th–19th c. (3)	POL_204
KuPi_059	Kampyrtepa Ota	Kampyr-tepa	66.677195000	37.785358000	0 (0)	prominent tomb	pottery	Bronze Age (1), end of the 4th–5th c. (2), 12th c. (7), 18th–19th c. (7)	POL_203
KuPi_060	Buloq Ota	Kampyr-tepa	66.669960000	37.786310000	0 (0)	prominent tomb	×	×	×

Tab. 2: The morphological features and noticeable spots (KuPi_001–060) in the oases of Zarabag, Karabag and Kampyrtepa.

Code	Village	Local Name	Coordinates	Coordinates	Elevation (m.a.s.l.)
ZA_S01	Zarabag	Kush Chinar Buloq	66.723295972	37.771942997	1046
ZA_S02	Zarabag	Qotur Buloq	66.739508752	37.76948534	1001
ZA_S03	Zarabag	no name	66.744846432	37.766777817	977
ZA_S04	Zarabag	Tupkhona Gumbaz	66.751651196	37.765298495	978
ZA_S05	Zarabag	Kurukhsay Buloq	66.755105043	37.768986532	984
ZA_S06	Zarabag	Raushan Buloq	66.745691411	37.767108735	1076
ZA_S07	Zarabag	Shturkhur Buloq	66.737984335	37.770008203	1035
ZA_S08	Zarabag	Bobolangar	66.740362000	37.762838000	974
ZA_S09	Zarabag	no name	66.732569000	37.767104000	1022
ZA_S10	Zarabag	Junus Buloq	66.738248000	37.768243000	1001
ZA_S11	Zarabag	Obdjiak	66.754403729	37.765652714	976
ZA_S12	Zarabag	no name	66.755314000	37.767202000	978
ZA_S13	Zarabag	no name	66.736123000	37.774092000	1014
ZA_S14	Zarabag	Chukora/Sukhrab Buloq	66.753915567	37.763857311	961
ZA_K01	Zarabag	×	66.736490931	37.774406858	995
ZA_K02	Zarabag	×	66.736392276	37.774500148	1010
ZA_K03	Zarabag	×	66.736227404	37.774618082	1017
ZA_K04	Zarabag	×	66.736061024	37.774737272	1021
ZA_K05	Zarabag	×	66.73589766	37.774774237	1021
ZA_K06	Zarabag	×	66.735963123	37.774811117	1030
ZA_K07	Zarabag	×	66.735942168	37.774666026	1028
ZA_K08	Zarabag	×	66.735945856	37.774615651	1027
ZA_K09	Zarabag	×	66.735955663	37.774559995	1027
ZA_K10	Zarabag	×	66.736002518	37.774769124	1029
ZA_K11	Zarabag	×	66.735988352	37.774882531	1029
ZA_K12	Zarabag	×	66.748168850	37.766711349	990
ZA_K13	Zarabag	×	66.748241773	37.766642282	987
ZA_K14	Zarabag	Rakhim Buloq	66.747166794	37.766179265	972
ZA_K15	Zarabag	Kron Buloq	66.748115122	37.764026038	966
KB_S01	Karabag	Kata Buloq	66.810712000	37.773038000	858
KB_S02	Karabag	Ashrav Buloq	66.807907000	37.772217000	857
KB_S03	Karabag	Tosh Buloq	66.796208000	37.785675000	893
KB_S04	Karabag	Chikes Buloq	66.796444000	37.785597000	896
KB_S05	Karabag	Dzhida Buloq	66.811786000	37.771104000	836
KB_S06	Karabag	Bakhodin Buloq	66.811296000	37.771893000	849
KB_S07	Karabag	no name (Orom Bulok)	66.809599000	37.772383000	845
KT_S01	Kampyrtepa	Bosh Buloq	66.669875000	37.785991000	1234
KT_S02	Kampyrtepa	Okhun Buloq	66.688800000	37.779112000	1179

Tab. 3: The water sources detected in the oases of Zarabag, Karabag and Kampyrtepa.

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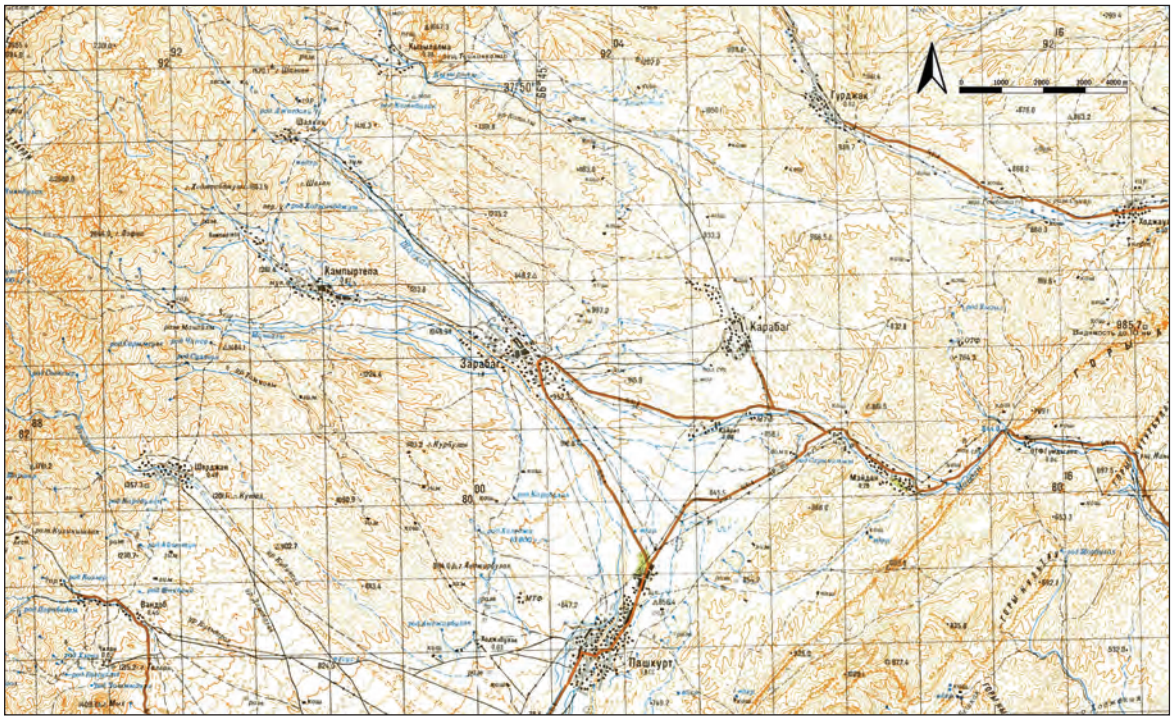
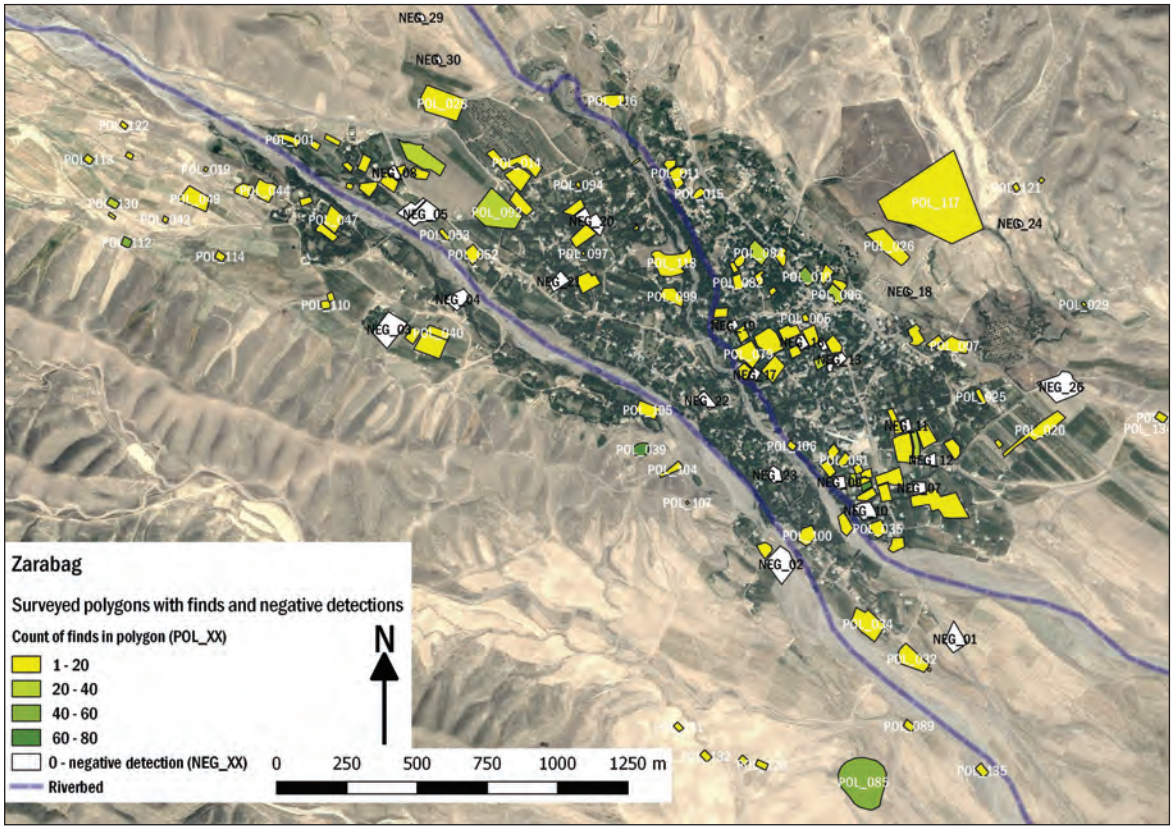
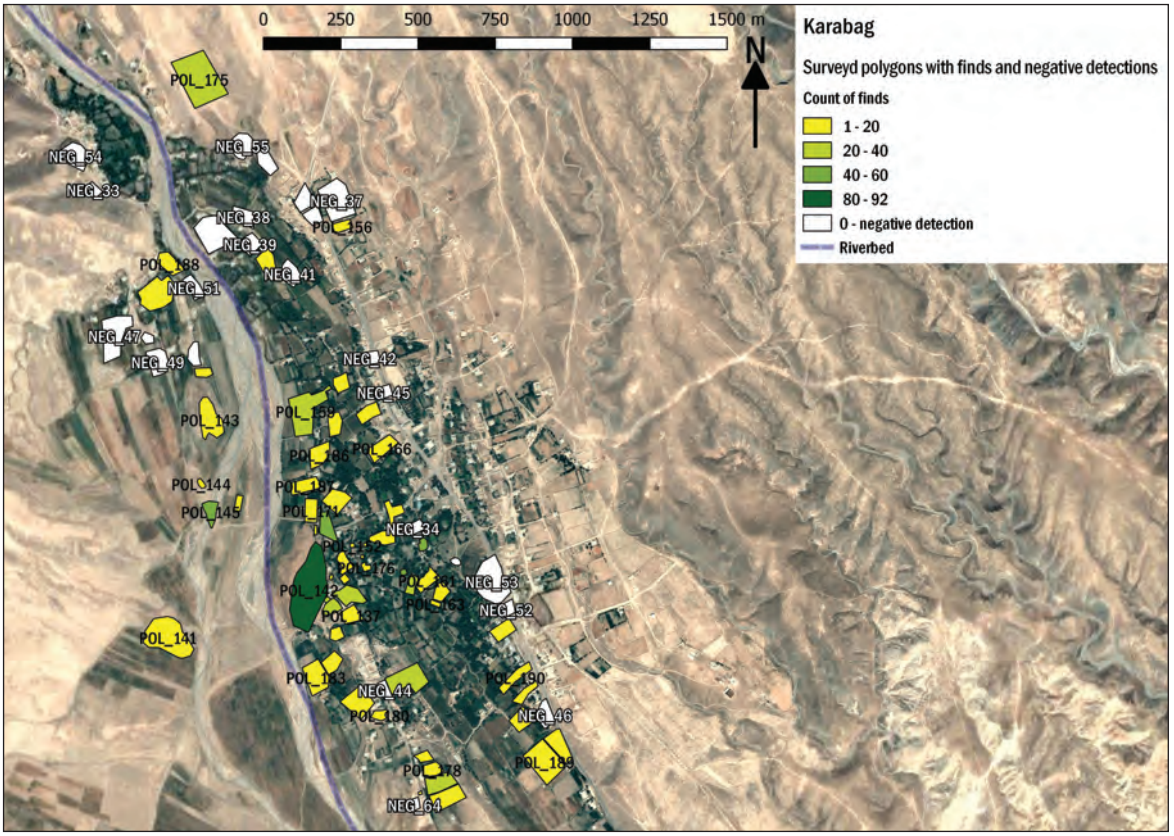


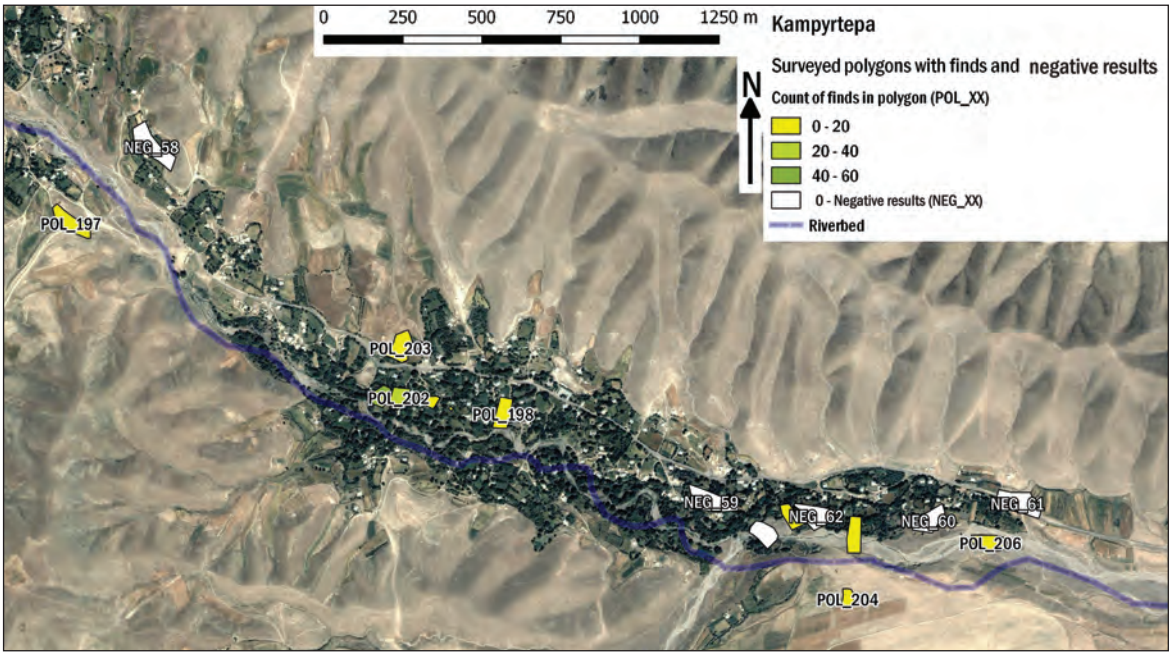
Pl. 4/1: Researched area on the Soviet military topographic map created in 1983 (1: 100 000).



Pl. 4/2: Overview of the surveyed polygons with the number of finds (POL_XX) and with negative results (NEG_XX) in the Zarabag Oasis (map by A. Augustinová).



Pl. 4/3: Overview of the surveyed polygons with the number of finds (POL_XX) and with negative results (NEG_XX) in the Karabag Oasis (map by A. Augustinová).



Pl. 4/4: Overview of the surveyed polygons with the number of finds (POL_XX) and with negative results (NEG_XX) in the Kampyrtepa Oasis (map by A. Augustinová).

Pl. 4/5: Khush-Vakttepa (KuPi_051) in the Karabag Oasis. The profile with the cultural layers in the disrupted surface of the site Khush-Vakttepa (photo by A. Augustinová).

Pl. 4/6: The storage vessel probably from the site Eishntepa (KuPi_056) in the Kampyrtepa Oasis which is still in use (photo by A. Augustinová).

Pl. 4/7: Bobolangar (KuPi_008), the Zarabag Oasis – the Bronze Age *dastarkhan* (photo by A. Augustinová).

Pl. 4/8: The granite mortar found in the Shalkan Say in the Zarabag Oasis – Yaz Culture (photo by A. Augustinová).