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RURAL SETTLEMENT ORGANIZATION IN THE CENTRAL PISIDIA IN LIGHT OF KARADİĞİN HILL (SOUTHWEST TURKEY)

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ABSTRACT

The aim of this study is to introduce the rural area of Karadiğin Hill, which is located in the northeast of Kremna ancient city in Central Pisidia, and provide information about rural settlements in the region, while evaluations were made on the architectural features of the houses in the settlement and different suggestions are presented. As a result of this study, it has been shown for first time that a rural settlement organization was formed in the central Pisidia. The new findings helped to understand the formation of Roman settlements with rural areas mainly in the 2nd century AD. When looking at the settlement order of Karadiğin Hill, it is noteworthy that it consists of rectangular, one-room simple hybrid spaces. This model mainly constitutes the building block of rural settlements in Central Pisidia. In fact, the Roman rural settlements have been a follow up of the rural settlement model that has been going on since the Iron Age with minor changes. The topographic structure that characterizes the settlement order made it compulsory for the rural population to cluster on high rocky hills close to the valley slopes or agricultural lands. The documented findings at Karadiğin Hill reveal that olive and olive oil production was a favorable occupation in the region; and it seems that olive-olive oil production is popular in rural areas similar to Karadiğin Hill geomorphology (e.g. İnarası, Hisarköy Asartepe), whereas in regions such as Karapınar Asartepe and Kumaryaylası, grape-wine production is preferred. As a result of our long-term studies in the region, it was determined that the urban population and rural population dispersed at the same rate during the Roman period.

KEYWORDS: Central Pisidia, Kremna, Karadiğin Hill, Rural Settlement, Agriculture, Olive Oil

1. INTRODUCTION

Pisidia, ancient region of southern Asia Minor, today covers the entire provinces of Isparta and Burdur and the north of Antalya Province and the west of Konya province and located north of Pamphylia and west of Isauria, south of Phrygia and northeast of Lykia (Fig. 1). Roman colony cities were established in the region by the emperor Augustus (Pisidia Antiochia, Olbasa, Komama, Parlais, Kremna) (Levick, 1967). Roman colonization had been military in character right from the start. Many of them are located in strategic areas that are easy to defend. Karadiğin Hill, Keraitai, Hyia, Panemoteichos and others were probably absorbed into territory of Kremna in Central Pisidia in the Roman Imperial period. The rural settlements of Kremna also reflect the Romanization activities in southern Asia Minor. This means that the Roman Empire dominated not only urban areas but also rural areas. The territories of other colonial cities in the region have not been determined yet. This made the Kremna Survey project more valuable.

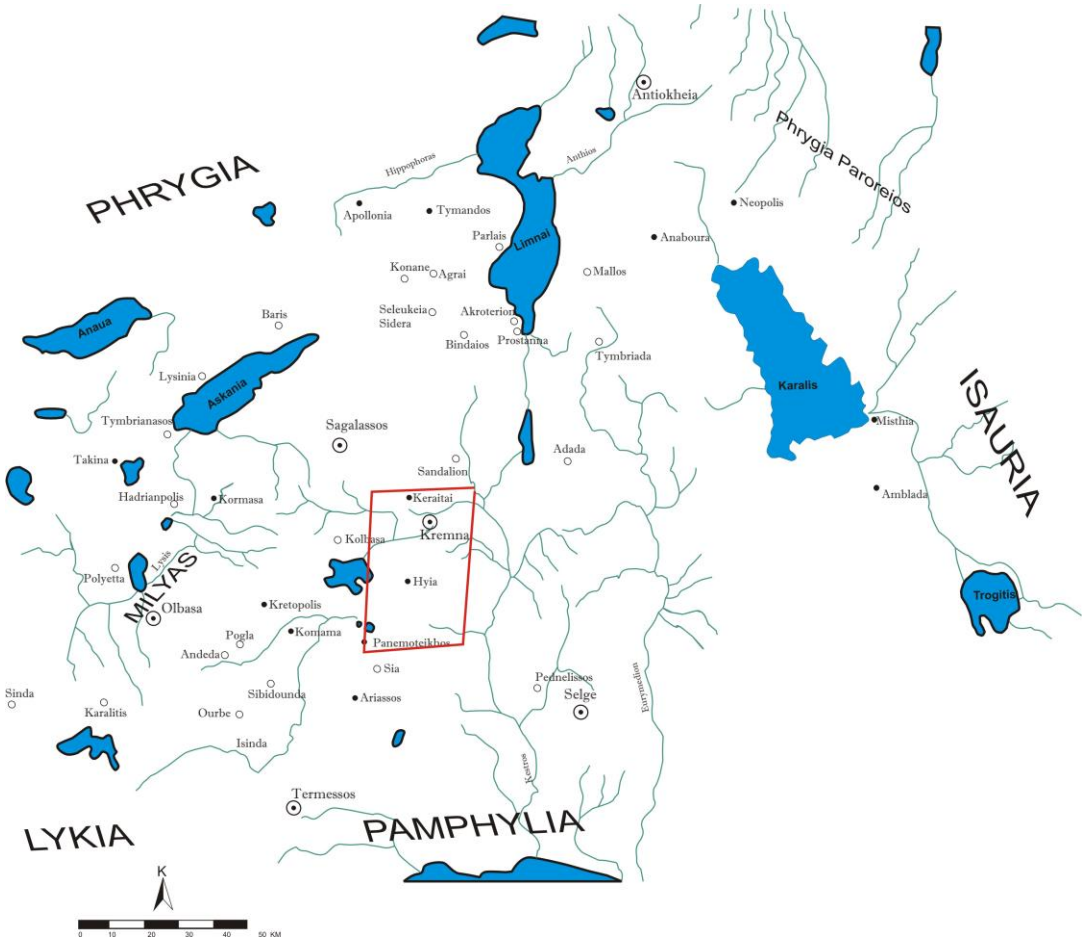


Figure 1: Pisidia Region

Within the scope of the project titled "Surveys in and around Kremna," -initiated in 2013 and ended in the end of the 2019 season - included the identification of the area of rule of Kremna in the Central Pisidia, a large number of settlements with different characteristics were identified around the city (Fig. 2) (Metin, 2012; 2014; 2015a; 2015b; Metin and Soslu, 2016a; 2016b; Metin at al., 2017; Metin and Soslu, 2017; Metin, 2018; Metin at al., 2018; Metin and Soslu, 2018a; 2018b; Metin at al., 2019). One of the areas that best reflect these differences in terms of settlement pattern is Karadiğin Hill. No information could be reached in the literature review on Karadiğin Hill. It was only learned that priest E. J. Davis, one of the western travelers in the 19th century, passed through Karadiğin Hill at a close distance. Davis probably described this area at a place that was 1.5 km away from Karadiğin in the west. In his depiction, he stated that it was composed of steep cliffs with 800-1000 feet (about 250-300 m) height and drew an engraving of the hill that partially overlaps with Karadiğin Hill (Fig. 3) (Davis, 2006). Besides, it would be appropriate to state that he did not conduct any investigation in the settlement.

Karadiğin Hill, which was detected in the first survey season, was registered as a 1st-degree archeological site by the decision of Antalya Board of Cultural Heritage Protection numbered 20.01.2014/2356

(K 37.3217 D 030.5239). In the initial investigations we conducted in 2013 at Karadiğin Hill, on the northeast of Kremna with an airline distance of 5-6 km to the city, it was concluded that the settlement had exposed to intensive illegal excavations and reliable archeological data could not be obtained there in a short time due to the waste soil and dense vegetation in the area. Because of the aforementioned reasons, it was decided that a large amount of time should be devoted to Karadiğin and detailed studies be conducted in the following seasons. The most important point emphasized in our brief survey notes on the Karadiğin Hill settlement in the 2013 season was that establishing a settlement in such a difficult area might be based on different reasons. Taking this idea further, we had suggested that Karadiğin Hill might have been a lair rather than a civilian settlement and tried to reinforce this possibility based on Strabo's narration (Strabon, XII.7. 3.). Surely, it was common in the world of that day for people who engaged in banditry in the Ancient Period to live in deserted and hard-to-reach areas or caves. However, the findings from the detailed studies in 2019 have revealed that the above consideration needed to be reconsidered. In this study, information on the settlement pattern of Karadiğin Hill was given and concrete information on olive oil production was presented. The place and importance of Karadiğin Hill in the rural settlement pattern of the mountainous Pisidia region were focused on using the findings obtained.

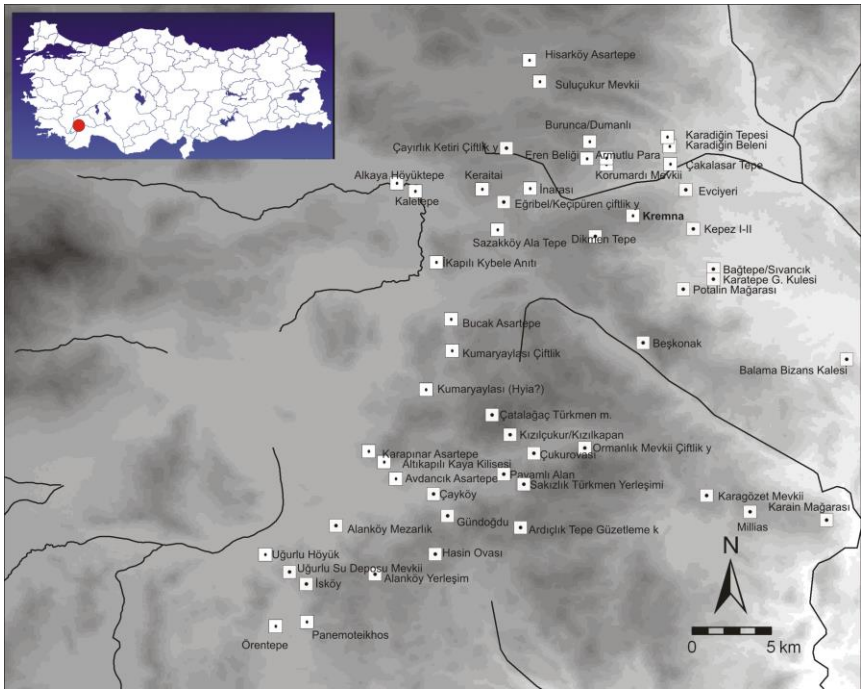


Figure 2: Settlements in and around Kremna in the Central Pisidia, in SW Anatolia (Kremna Survey Archive)

Figure 3: General View of Karadiğin Hill and Engraving of Davis (Kremna Survey Archive)

2. SETTLEMENT AND FUNCTION

The dwellings that form the main structure of Karadiğin Hill form the type of structure that is little known within the rural settlement pattern of the Pisidia Region. The Kremna-focused field studies we performed devotedly in recent times in the Central Pisidia provided important information on rural settlements in Rome and the Early Byzantine Period. The survey findings also shed light on the Late Antiquity-Middle Byzantine dwelling architecture, which formed the transitional period of these two periods (Metin at al., 2018; Metin and Soslu, 2018b; Metin at al., 2019). The studies of Mitchell, who conducted surveys in the region, were mostly confined to urban centers in the Central Pisidia, and rural areas and their settlement patterns during the Roman Period remained unknown (Mitchell and Waelkens, 1987; Mitchell, 1987a; Mitchell, 1987b; Mitchell and Waelkens, 1988; Mitchell at al., 1994; Mitchell, 1991). In this context, with the surveys we conducted at the mountainous territory of Kremna between 2013-2019, important information on Roman Period Pisidia Region settlement pattern and dwelling architecture were obtained from especially rural settlements such as Karadiğin Hill, Hisarköy Asartepe, Karapınar Asartepe, Kumaryaylası, Çayırlık Ketiri, and Eğribel/Keçipüren. Based on this, it was understood that a large majority of Roman and Early Byzantine Period rural settlements/villages clustered at the mountainous areas of the Central Pisidia were established on defendable rocky hills, and very few on slopes. Although the early dates of these villages are not known, the surrounding religious structures dated to B.C. 6th century and later periods such as the Statue of Cybele with doors, İnarası Outdoor Worship Area, Keraitai Men Sanctuary, and Mother Goddess Sanctuary suggest that they were continuously inhabited from the Iron Age to the end of the Byzantine Period (Metin, 2014; Metin, 2015a; Metin at al., 2017; 2018). Probably, these dwellings had been used for a long time without changing their origins with minor additions made in pre-Roman times (Table 1). Just like in Karadiğin Hill, protected areas and large agricultural areas formed the basis of these settlements (Fig. 4).

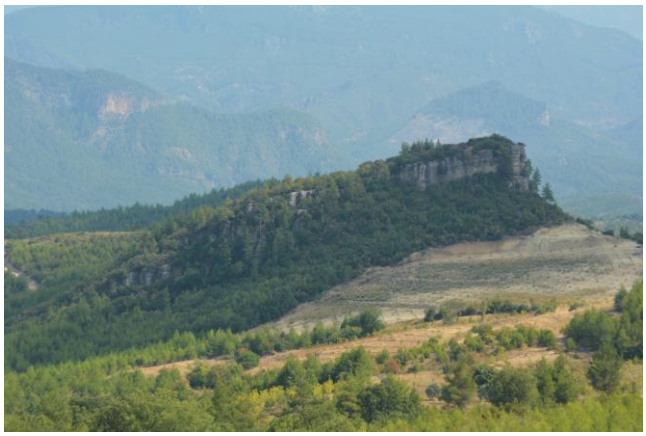


Figure 4: Agricultural Areas Between Karadiğin Hill-Çakalasar Hill (Kremna Survey Archive)

No	Name	GPS Coordinate	Dating	Period
1	Kremna	N 37.49773 E 30.68201	Inscription, Coins, Ceramics, Architectural Buildings and City Walls	Hellenistic, Roman and Byzantine
2	Keraitai	N 37.51542 E 30.60586	Inscription, Coins, Ceramics, Architectural Buildings and City Walls	Classic, Hellenistic and Roman
3	Millias	N 37.30547 E 30. 75177	Inscription, Coins, Ceramics, Architectural Buildings and City Walls	Classic, Hellenistic and Roman
4	Panemoteikhos	N 37.26755 E 30.50441	Inscription, Coins, Ceramics, Architectural Buildings and City Walls	Archaic, Classic, Hellenistic and Roman
5	Burunca-Dumanlı	N 37.324097 E 30.393819	Ceramics	Roman and Byzantine
6	Hisarköy-Asartepe	N 37.350785 E 30.380556	Ceramics and City Walls	Hellenistic and Roman
7	Çayırlık Ketiri	N 37.49798 E 30.67838	Ceramics	Roman
8	Kaletepe	N 37.294973 E 30.334675	Ceramics	Roman
9	Eğribel-Keçipüren	N 37.50979 E 30.61617	Ceramics and Architectural Buildings	Roman
10	Eşek Yaylası	N 37.49191 E 30.67330	Ceramics and Architectural Buildings	Roman
11	Kepez I ve II	N 37.48957 E 30.74115	Ceramics and Architectural Buildings	Roman
12	Bucak Asartepe	N 37.51500 E 30.63101	Ceramics and Architectural Buildings	Roman
13	Kumaryaylası Farm Place	N 37.42221 E 30.58655	Ceramics and Architectural Buildings	Roman
14	Kumaryaylası (Hyia ?)	N 37.40147 E 30.57138	Inscription, Ceramics, Architectural Buildings and City Walls	Hellenistic and Roman
15	Karapınar Asartepe	N 37.36240 E 30.53848	Ceramics and Architectural Buildings	Roman and Byzantine
16	Avdancık Asartepe	N 37.34881 E 30.55456	Ceramics, Architectural Buildings and City Walls	Roman and Byzantine
17	Örentepe	N 37.26551 E 30.48639	Ceramics and Architectural Buildings	Roman and Byzantine

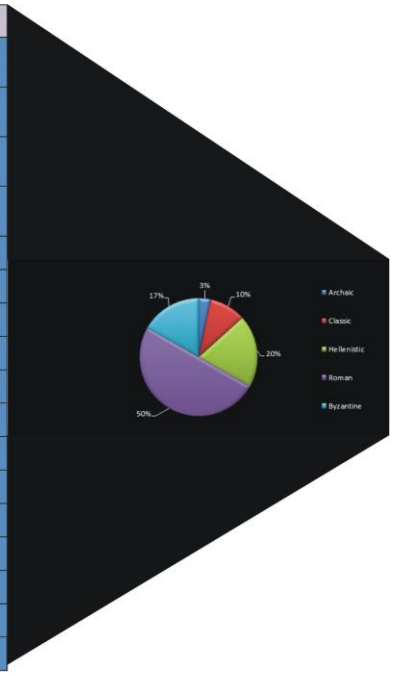


Table 1: The Karadigin and in around in the historical situation of Urban and Rural Settlements (It is observed that the demographic population density in the urban and rural areas has increased periodically from the Archaic Period to the Roman Period. It has been determined that the Byzantine population and settlements in rural areas have increased over time, especially in urban environments since the Late Antiquity).

It has been determined that rural settlements in and around Karadiğin are influential in their topographical features, apart from socio-cultural influences, among the factors that change the settlement typology in historical periods. The Pisidia Region has a hilly and rugged energetic geomorphological structure separated by deep valleys. These features have created a location for the settlements, especially affecting the typology of the settlements in the rural environment. As can be seen from the data on the graphic on rural settlements, hill settlements and slope settlements have been highly resettled. The geological structure, rocky and mountainous areas are also rural areas where residential architecture is built. However, settlements along the valley are the least preferred sites. Although the existence of natural effects such as floods and landslides are claimed among the main reasons for the occurrence of this situation, the invasion is seen as attractive points, probably because water resources are a very important requirement for basic life functions. In addition, valley settlements were generally used as very few settlements because they are easy to defend but difficult to defend against sieges and potential threats. While these were considered, it was understood that the hills, slopes and rocky points were popularly preferred in the Hellenistic and Roman periods because of their natural defense systems, and settlements were established on the sides of the valley when the invasions started to decrease since the Late Antiquity (Tables 2 and 3).

No	Name	GPS Coord.	Cliff	Slope	Hill	Valley
1	Karadiğin	N 37.3217 E 30.5239	X	X	X	
2	Hisaköy-Asartepe	N 37.350785 E 30.380556	X		X	
3	Kumaryaylası (Hyia ?)	N 37.40147 E 30.57138	X		X	
4	Çayırlık Ketiri	N 37.49798 E 30.67838		X	X	
5	Eğribel-Keçipüren	N 37.50979 E 30.61617		X		X
6	Karapınar Asartepe	N 37.36240 E 30.53848	X	X	X	
7	Evciyeri	N 37.51078 E 30.70849		X	X	X
8	Avdancık Asartepe	N 37.34881 E 30.55456	X	X	X	
9	Kepez I ve II	N 37.48957 E 30.74115		X	X	
10	Bağtepe	N 37.45540 E 30.75071			X	X

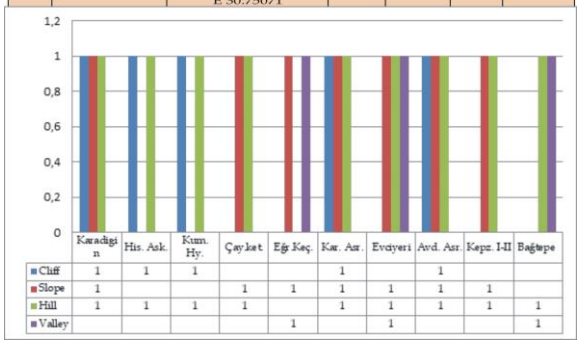


Table 2: The Karadiğin and in around typology of settlements

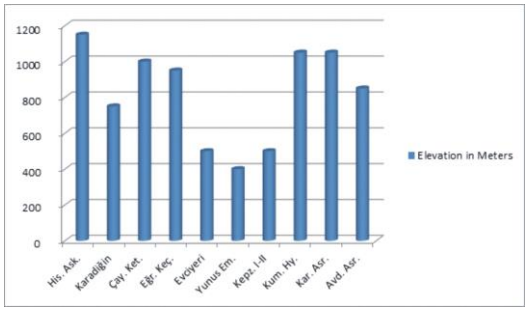


Table 3: Height of settlements in and around Karadiğin Hill

The settlement in Karadiğin Hill is located on the northwest slope of the ledges running east-west (Fig. 5). This area consists of five ledges with cliffs and running from south to north like the fingers of a hand. To the east are agricultural lands, and to the north is a tributary of the Kestros Valley, and forest-covered mountain ranges run to the south and east. The structures lie north-south in the western part of the area, which is encircled by cliffs in the north and west. The dwellings are concentrated between the ledges no. II and IV, and there are few in the south and north edges. It was understood that extensive illegal excavations had destructed the area. As the remains of the structures have remained under a dense forest cover, the establishment composition of the dwellings can hardly be distinguished. For example, in the ledge no. V in the north, significant remains of a place were found and there were not many traces apart from that. Because the extensive illegal excavations caused damage in the ledge no IV, it was observed that the remains of the walls of the building were destroyed. At the same time, the remains must have been hidden under the dense forest cover. Traces can be followed on the surface in some parts. Appropriate ground for residential construction was prepared by constructing three terrace areas on the slope of the land. The most prominent area that summarizes the settlement plan at Karadiğin Hill is the ledge no IV. In some areas destroyed by illegal excavations, the remains of the walls were clearly observed, and it was determined that these wall were generally made using drywall technique in the form of simple bonds of double rows of conglomerate stones (Fig. 6). The conglomerate stones used in the walls of the houses were obtained by cutting certain parts of the surfaces of the cliffed parts at the very end of the houses. Thus, flat surfaces were formed in the numbered areas with ledges.

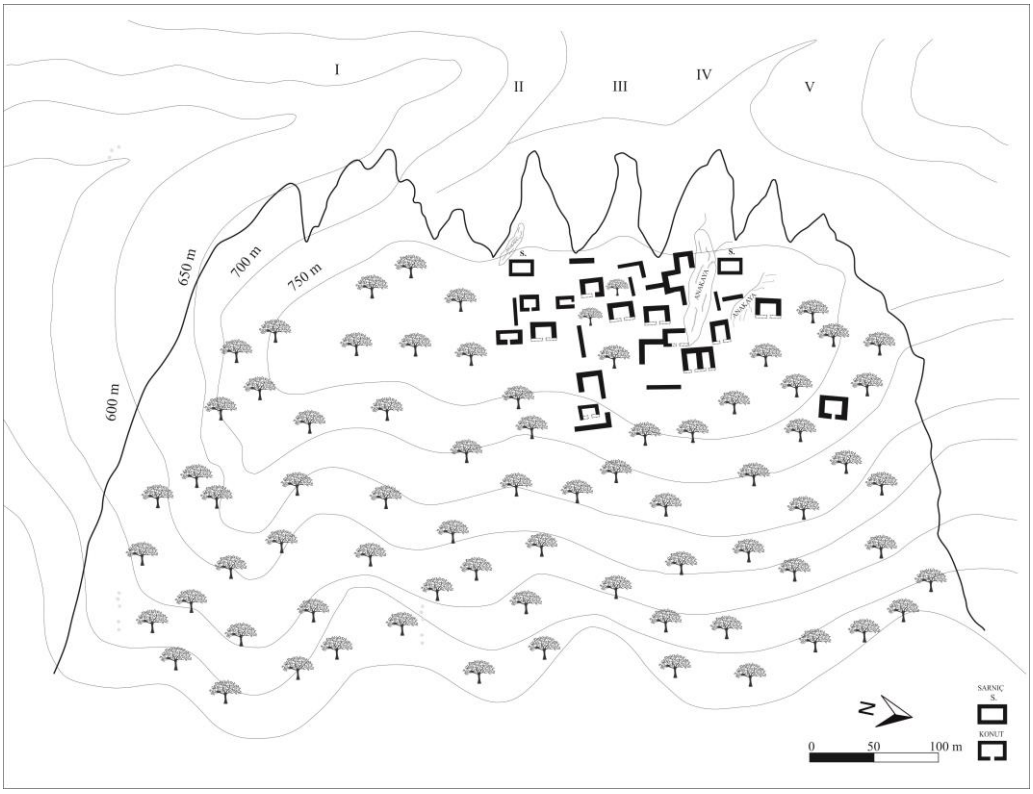


Figure 5: Karadiğin Hill Plan (Kremna Survey Archive)

Figure 6: Karadiğin Settlement, Wall Remains (Kremna Survey Archive).

The inner parts of the 0.60-0.70 m-thick walls bonded double rows were filled with small stones; their corners were reinforced with more clear-cut conglomerate blocks. The building was reinforced by using longitudinal blocks instead of double row bonding in some walls of the houses. No information could be reached on the jamb forms at the entrances of the houses most of which are facing east. We think that monolithic stones might have been used in the jambs just like in the houses at İnarası, which is near them. The wall structures of the houses identified and the stones scattered around them indicate that the buildings were one-story. In this case, it may be thought that the second floors of the houses had been built in the form of wooden architecture. However, without clear information, suggesting this idea is somewhat imaginary. In general, we are of the opinion that the one-story housing technique was preferred at Karadiğin Hill, which has a difficult terrain structure. For this reason, we argue that all of the house walls were bonded with stone up to the roof level. We support this argument with a one-story, rectangular, one-room house that was bonded using regular block stones and that we detected in 2013 at İnarası (Fig. 7) (Metin, 2014).

Figure 7: İnarası, Place (Kremna Survey Archive)

The building schemes of the houses consist of simple, one-room, rectangular hybrid places varying between 5.00-7.00 m without a courtyard. In the ledge no IV, several structures consisting of two or three places in a row were found. Most of the places were built independently of each other and their foundations were placed on bedrock. Bedrock was directly used in some of the building walls. As the houses were adjusted to the topographical structure of the terrain, the concept of house-street is not observed at Karadiğin Hill. As far as it is understood from the remains, the number of these places exceeds twenty. However, they were made in a rather simple form.

Several structures identified on the ledge no III were found to be running north-south in contrast to the direction of the houses. The dimensions of these structures are smaller than the dwellings. From this point of view, it is possible to say that there were small warehouses between the houses. Perhaps the Pithos fragments and coarse ceramics from the Roman period, which were found extensively on the surface, were pointing to the cereals and olive oil preserved in these warehouses.

Sufficient archaeological data was obtained regarding the top layer material of Karadiğin Hill dwellings. In our research in Central Pisidia, we have found numerous settlements where roof tiles were used in the superstructures of the houses organized with a single space. Examples of farm settlements include Çayırlık Ketiri, Kumaryaylası Farm Structure, Evciyeri, Yunusemre Hill, etc., and examples of village settlements include Hisarköy Asartepe, Karapınar Asartepe, Kepez I-II, Avdancık Asartepe, and İnarası, etc (Metin, 2014; Metin at al., 2017, 161-170; Metin and Soslu, 2017; Metin at al., 2018). The roof tiles used in the superstructure were found in all of them. Roof tile forms are identical to those used in Kremna in B.C. 2nd-3rd centuries. However, there are also examples that we think indicate the Late-Antiquity-early Byzantine Period in a simpler form. The fact that there were large clay deposits such as Çanaklı Plain the region made it possible to supply raw materials; as a result, roof tiles were used extensively in the superstructures of the buildings in both urban and rural settlements. Since it was easy to close the top of the simple spaces, bonding timber must have been laid on top; it must have been covered with bushes and grasses to block permeability, its top must have been plastered with clay again, and finally terminated with tile. Also, it is thought that there was no need to consolidate single spaces with wooden bearing elements.

Since no archaeological excavations have been carried out in the rural settlements of Central Pisidia or Karadiğin Hill in particular, the question of how heating was achieved inside the dwellings remains unclear. This uncertainty also applies to the problem of how cooking was done. We have encountered many situations where cooking stoves are set in yards and cookings are done in this way in today's villages of Taşyayla, Hisarköy, Belören, Çamlık, Sivisler, and Avdancık. Therefore, this activity may have been carried on today as a tradition taken from the past. In winter conditions, both heating and cooking were most probably done with a simple stove or a stove niche inside the houses. An example that we think may be related to the last point was found in İnarası (Fig. 8). It is known that there are fireplaces with different names in various regions that perform the same function even today.

3. WATER RESOURCES

The biggest shortage of rural settlements in the Central Pisidia region is the scarcity of water resources. The situation is the same both in small cities such as Keraitai, Sia, Hyia, Panemoteikhos, and Millias and in large cities such as Kremna. Transfer of water resources on the valley slopes to settlements has not become possible because of both the elevation difference and the need for a large labor force. The founders of the city tried to overcome this problem with cisterns carved into the bedrock. Water cisterns were found in many urban and rural settlements at the survey site. Cisterns in urban settlements exhibit partially similar forms. Based on this, the majority of cisterns are bottle or bell-shaped, or have a form structure close to the rectangle (Fig. 9a). Despite that, there is no unity of forms in cisterns in the countryside. Here, it is necessary to make room for İnarası. Because İnarası had a characteristic of a slope settlement and was a sacred place for the region, there was a stream right next to it that is also used today and it should be noted that it did not have water problem. At the same time, agricultural areas were irrigated with water flowing through the creek. The aqueducts built on the bedrock identified in the settlement confirm this determination (Fig. 9b).

Figure 8: İnarası, Stove Niche (Kremna Survey Archive)

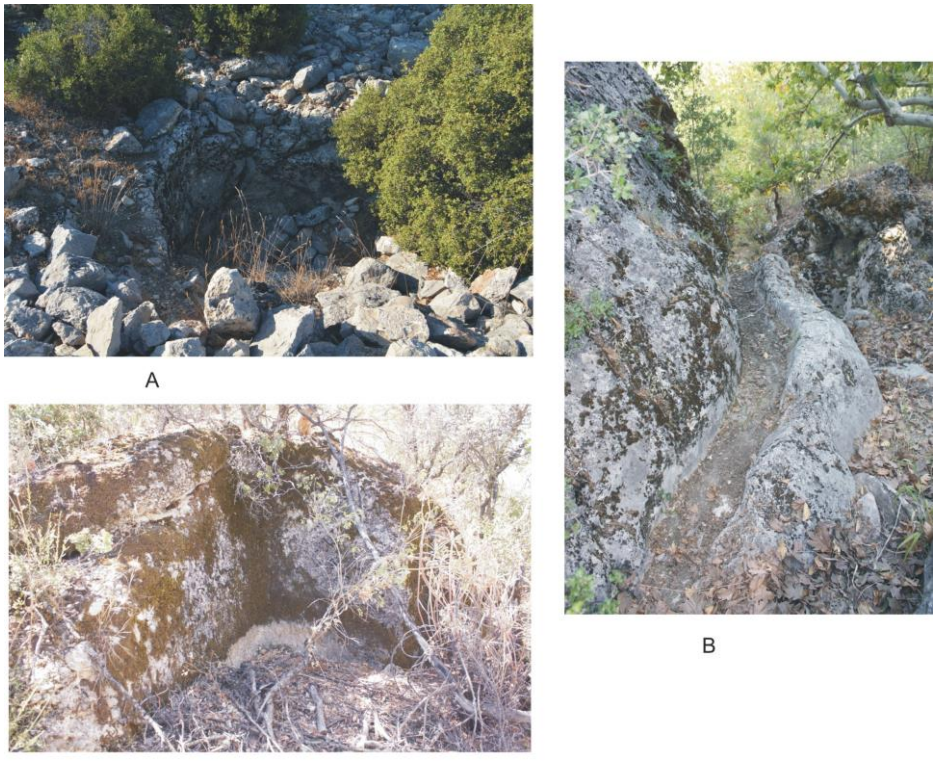


Figure 9: a. Kumaryaylası/Hyia? Cistern, b. İnarası, Aqueduct, c. Karadiğin Hill, Cistern (Kremna Survey Archive)

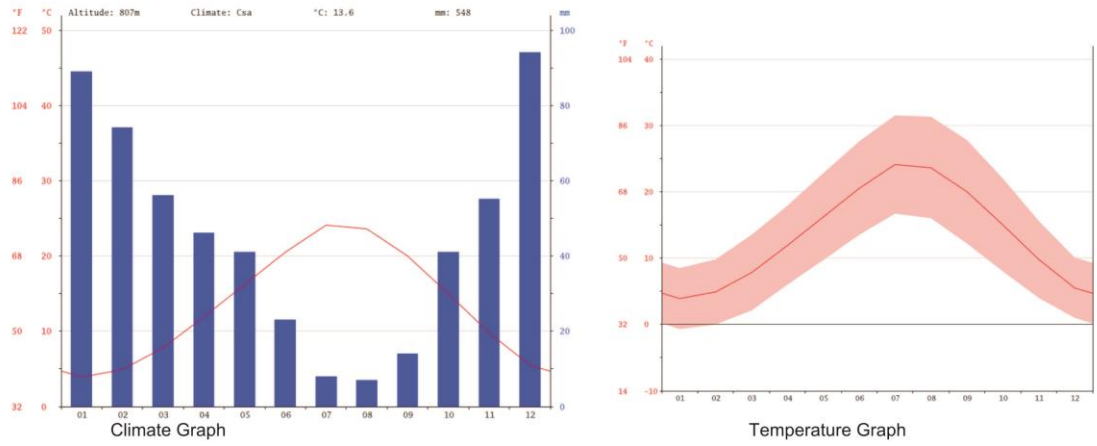
Two cisterns carved into the bedrock were found in the Karadiğin Stone. Cistern No. 1 is in the east of the ledge no. IV. It measures 2.00 x 3.00 meters (Fig. 9c). Its depth could not be measured as it was filled with stone and earth. The Cistern no.2 is at the very starting point of the ledge no. II. It measures 2.00 x

6.20 meters. Its depth could not be measured because of the vegetation and earth fill in it.

4. AGRICULTURAL ACTIVITIES

It is necessary to take into account also today's conditions for understanding the agricultural activities of the Karadiğin Hill and its surrounding settlements during the Antiquity. For this reason, since it was covered with dense forests, forestry became an important agricultural activity in the past. When we imagine the narrations of P E. J. Davis, one of the Western travelers in the 19th century, after his visit to Ağlasun/Sagalassos, it is clear that he passed right near Karadiğin Hill. The most remarkable part of his narrations is that most of these areas were covered with forests. Davis, who mentioned that there was oak, holly, dogwood and ash trees, myrtle and strawberry trees, stated that Alpine rose and cistus grew there and the botany of the natural passage near the top of Karadiğin Hill he cited as Asarköy was worth examining (Davis, 2006).

The fact that the center of Mountainous Pisidia, where Kremna is located, runs parallel to the coast depending on the natural structure of the Taurus Mountains has caused limited settlements in the region. In spite of that, as it is connected to the Kestros Valley and the Mediterranean Sea via deep passages, and there are low plains between them, this made it possible for rural settlements to cluster around these areas (Table 4). In other words, the low plains are very fertile and the formation of an agriculturally positive climate as it approaches the Mediterranean Sea has formed the cornerstone of the settlement order in the region. In fact, these areas are still places where intensive agricultural activities are carried out today. Karadiğin Hill and similar settlements in Pisidia have enabled olive oil production, which had an important place in the economy of the Antiquity, because of the reasons we described above.



	Jan.	Fab.	March	Abril	May.	June.	July	August	Sept.	Oct.	Nov.	Dec.
Avr. Temp (° C)	3.9	4.9	7.8	11.9	16.2	20.5	24.1	23.6	20	15	9.8	5.5
Min. Temp (° C)	-0.7	0	2.1	6	9.7	13.5	16.7	16	12.2	8	4	1
Max. Temp (° C)	8.5	9.8	13.5	17.9	22.8	27.6	31.5	31.3	27.8	22	15.6	10.1
Rain (mm)	89	74	56	46	41	23	8	7	14	41	55	94

Table 4: Climate data of central Pisidia. The driest month is August, with 7 mm of rain. With an average of 94 mm of precipitation, the highest amount of precipitation is observed in December. The warmest month of the year is July, with an average temperature of 24.1 ° C. The average temperature in January is 3.9 ° C. this is the lowest average of this year. The precipitation varies 87 mm between the driest month and the wettest month. The average temperature varies around 20.2 ° C throughout the year.

The narration of ancient writer Strabon (Strabon, XII.7. 3) "*The nature in the region is extraordinary because this country between the peaks of the Taurus Mountains can accommodate tens of thousands of people and is so fertile that olive trees are planted in many parts there are beautiful vineyards and plenty of pastures for all kinds of cattle*» shows the importance of the olive industry in Pisidia in the Antiquity. During a seven-year survey season in and around Kremna, the data on olive oil production was found clustered between Karadiğin Hill and İnarası (Metin, 2019). This data is of course directly proportional to the growing conditions of olive. With the temperate climate of the Mediterranean, which moves forward into the inner parts through deep valleys, the olive has been provided with a suitable growing environment

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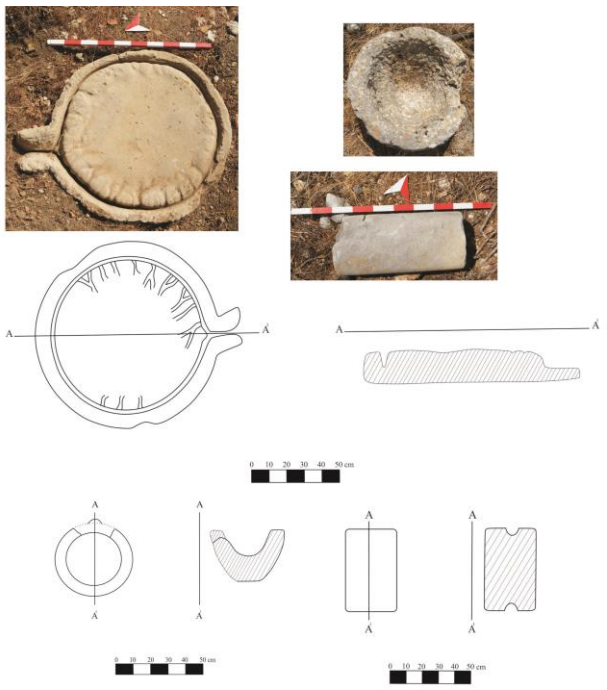

Figure 10: Karadiğin Hill, Olive Oil Press (Kremna Survey Archive)

The narration of Strabo above was incarnated at Karadiğin Hill. In the 2013 survey season, we had no data on olive oil production at Karadiğin Hill. Important information about an olive oil mill unearthed by illegal excavations to the south of ledge no III, where the dwellings were concentrated in the period specified in the 2019 season. In this area, there is a portable olive press bed (Fig. 10). There is a 0.07 m deep and 0.02 m wide circular channel in a round press bed with a diameter of 0.80 m. The channel was terminated with a "V" shaped discharge channel (Bulut, 2018; Tekocak and Adıbelli, 2010; Pamir, 2010; Diler, 2010). We have obtained the other parts of this mill by finding the trapetum basin and the stone cylinder around the press bed. The flat bottom trapetum basin is 0.28 m high and its internal depth is 0.17 m. It must have been used for crushing products such as dry legumes with the help of mortars. The stone cylinder, which has a multi-purpose use like a trapetum basin, measures 0.28 x 0.55 m. There is a slot at both ends where the apparatus is fitted to move the cylinder with a 0.08 m diameter. The mill provided precise information on olive oil production at Karadiğin Hill and surrounding settlements. However, it is very difficult to give clear information about the size of the production. It is our greatest wish that this issue will be clarified with small-scale excavations to be carried out in these areas in the future.

Apart from the archaeological data, our most interesting observation about olives at Karadiğin Hill is a large number of wild olive trees in the area, which has a length of almost 1 km starting from the numbered ledges in the area and leading to the sloping agricultural terraces to the east (Fig. 11). We think it is true to say that these small and big trees in large numbers sprouted from the olive trees of the past.

Figure 11: Karadiğin Hill, Wild Olive Trees (Kremna Survey Archive)

The population living in the countryside during the Roman period and after is thought to have organized in the form of small settlements to have a life to meet daily needs such as grain, especially to meet their own needs in the surrounding agricultural areas. In the survey area, threshing sites offering concrete data on grain production in the region were found in Eğribel/Keçipüren, Kremna, Burunca/Dumanlı (Fig. 12). As part of its function, the threshing areas, which are usually raised in the south direction, are round planned and vary between 10 and 18. It is understood from the threshing place established near the cliff just to the south of the Kremna Bath/library structure that the threshing places, whose surroundings are bounded by simple masonry stones, have been used in recent times. The abovementioned threshing site has a round plan similar to the examples seen in rural areas; its surroundings are bordered with simple stones without mortar, and its floor consists of hardened soil.

Figure 12: Burunca/Dumanlı Threshing Floor (Kremna Survey Archive)

The mountainous topographic structure of the Central Pisidia and its dense covering of scrubs are instrumental in the consideration of sheep and goat breeding as an important source of livelihood in the Antiquity. According to our surveys, it is appropriate to say that transhumance continues in especially the Avdancık-Kumaryaylası-Bucak line. Of course, the only difference here is that today people who produce livestock do this job seasonally and sell their meat and dairy products on certain days of the week in markets established in the region. In the Antiquity, it seems more likely that production was much more done at a needed rate.

5. POPULATION

High rocky hills clustered around deep valleys in the Central Pisidia have offered a sheltered habitat for people at all times. It can be said that the effects of plunders occurred frequently especially in the region were limited to the mountainous Central Pisidia. One might think that the effects of epidemics that could come from the outside of the region might have been less for these reasons. However, it is not right to say that the rural settlements clustered around the ancient city of Kremna had crowded populations. Besides, a crumb of information to support this idea has not yet been obtained. As a result of the studies we have carried out in the region for a long time, we think that urban population and rural population were dispersed at the same rate in the Roman period; with the weakening of the cities in the region with the Early Byzantine period, the majority of the population lived in the countryside. The large number of Byzantine settlements we have identified in the rural areas supports this idea.

The cities, which are the socio-economic centers of local governments, had great importance in the Late Antiquity on the change - the transformation of economic life. The most important feature of these cities was that they were intertwined with the small settlements in rural areas in terms of economic life (Mitchell, 2016). Because, the dominant groups had to deal with these areas to enable their relations with the peoples in urban and rural areas. Also, farm-like settlements in the countryside have been an important place for those fleeing economic pressures in the cities (Ergin, 2013). As a result of this shift of population to rural areas, olive and wine production areas in rural areas became important within the framework of supply and demand.

6. SMALL FINDS

A large number of metal materials were found at Karadiğin Hill that had been set aside by individuals who made illegal excavations in the area during the 2013 season. The most notable among this group is the arrow-spear tips (Fig. 13). These examples are also important in terms of providing information about the usage ranges of settlements in rural areas of the region, specifically at Karadiğin Hill. One can assume that the arrow-spear-tips included in the study were the products of the motivation of the people living in rural areas to defend themselves against external threats, or vice versa.

Figure 13: Karadiğin Hill, Arrow-Spearheads (Kremna Survey Archive)

No. 1 of the examples listed between 1-5 is the pyramidal arrowhead with three-pointed wings. The arrowhead with socket section intact was used in the 3rd-6th centuries AD (Davies, 1977, 259, fig. 1.4; Krekovic, 1994, 220, Fig. 7.2; James, 2004, 202, figs. 123, No 706–712; Bitner at al., 2006, 108, fig. 1, 16–19; 117, fig. 8.4; Delrue, 2007, 241, fig. 3.19). Example No. 2 is a flattened, blade-back shaped iron spear tip flattened with forging technique. The tip is intact and the socket in the tail section is missing. There are similar examples from the 3rd century AD (Dixon and Southern, 1996, 113, drw. 42; Oransay, 2006, 92, 333, pl. XVI, D 8, D10). The example no. 3 is the spearhead with a highly corroded iron socket sec-

tion. The mouth of the iron spearhead, which is 0.9 cm long, is sharply angular. Its similar ones have been dated to the 6th-7th centuries AD (Bertram and Göken 1995, 62). Examples no. 4 and 5 are arrowheads with similar profile structures. Example no. 4 is 9.0 cm long. For the example no. 5, both ends are broken and missing and the length of the section that was intact was measured 8.3 cm. Both give an angular cross-section from the body. The socket section of the arrowheads tapering towards the end is rectangular. The 6th – 7th centuries AD are the common time intervals for these examples (Robinson, 1941, 394–395, pl. CXXIII, no. 1994, 1996; Crowfoot at al., 1957, 454, fig. 111.20; Hachmann, 1961, taf. 10.7; Alicu at al., 1994, 35, pl. 22, 172–173; Pasinli at al., 1994, 347, res. 8; Gil at al., 2000, 21, fig. 5.1; Luik, 2002, 195, abb. 90, 200; James, 2004, 220, fig. 130, no 791; Henning, 2007, 667, taf. 2, 14; Böhlendorf and Arslan, 2012, 361, abb. 10).

7. CONCLUSION

It became clear with this study that the simple, rectangular, one-room building plan in Karadiğin Hill formed the basis of the rural settlement model in the Central Pisidia. It is clear that the biggest factor in the preference of rural settlements is proximity to agricultural areas. Within the framework of this factor, when we look at the building phase of the houses, it is evident that there are two different options here. The first is the valley slopes and the second is the sheltered, high rocky hill settlements. It can be said that the dwellings or farm settlements built on the valley slopes may consist of more regular, partially ordered spaces within the framework of a certain plan. It was observed that this plan was not implemented in settlements established on rocky hills, and dwellings were often placed according to the topography. In both settlements, it was determined that the building foundations and the walls were shaped by bedrock in areas where the land structure allowed. Karadiğin Hill is one of the example settlements where these two systems came into existence at the same time.

We met the settlement scheme at Karadiğin Hill at many points in the region. As can be seen in the examples of Kumaryaylası and Çayırlık Ketiri, there are a small number of houses located around a large building cluster, whereas settlements where a large number of houses are clustered can also be seen as in Karapınar Asartepe, Hisarköy Asartepe, and İnarası settlements. Our first example forms the smallest residential units rather in the style of a farmhouse by its location. In the central Pisidia, the slopes overlooking the valleys and the high hills immediately near the road networks are characteristic of this type of settlement. The second examples are usually founded in highly sheltered areas, except for deserted, naturally sheltered settlements such as Karadiğin Hill and İnarası, surrounded by simple fortifications. This settlement organization probably became a model for colony cities in southern Asia Minor. However, the scarcity of studies indicating territory boundaries of Asia Minor colony cities makes difficult to provide a more definite information.

Products obtained from the surrounding plains or terraced agricultural lands were processed in olive or wine mills located near the settlements. It is thought that these mills have been used over an extended period of time from the Roman Imperial Period to the Byzantine period (Metin, 2019). The Hadrianus coin found in the waste soil of the illegal excavation destruction carried out in the mill at Karadiğin Hill helps us in dating.

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