

Eshkaft (Cave) and Open Site of Pal Hesseinali in the Intermountain Plain of Aseman Abad, Ilam, Iran


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Abstract

In the north of Ilam province, there are vast plains surrounded by rugged and forested mountains. Until many years ago, other than the Hollailan Plain that was examined by a Danish archaeological team, other regions of Ilam province remain unknown in terms of Paleolithic research. However, several sites from this period have been identified and introduced in recent years thanks to new studies and researches. In 2003, the author conducted a survey of the mountainous and forested areas of the Intermountain Plain of Aseman Abad for the first time. During the course of that survey, sites, and settlements from different periods were identified and studied. The results showed that the slopes and caves of this region have evidence from the Lower Paleolithic to the Upper Paleolithic periods and even later periods. In the current article, the author examines a cave and an open site located in the vicinity of the aforementioned plain, which, considering the presence of chert and flint rock formations on its surface level, as well as scattered remains near these rocks, appears to have been a place for obtaining stone and making tools during the Paleolithic era.

Keywords: Aseman Abad; Eshkaft (Cave); Open Site of Pal Hesseinali.

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Introduction

In the north of Ilam province, there are plains surrounded by rugged and forested mountains. The Intermountain Plain is one of them, with a width of 13 kilometers and a length of approximately 32 kilometers, including the mountain and forest areas. Rawlinson, who traveled through this area in the early 18th century, wrote in his travelogue: The length of the Aseman Abad valley is about 15 kilometers, its width is slightly more than 4 kilometers, and it belongs to the Mansouri Kalhors. Since the amount of arable land on the plain of Ivan is greater than the needs of the nomads, and the Aseman Abad plain is not very suitable for cultivation due to its high altitude, it is only used as a summer resort by them. Two roads have been constructed around the Aseman Abad Plain, one along a small river (Aseman Abad River) that feeds both plains and the other through the forested hills.

The first of the aforementioned roads is better and closer. But the author preferred the second one for some reasons. Since this road passes through the villages of Pishteh i Vamarz and Mayvelah¹ he was afraid that his companions might not be able to reach Chardavol before dark, and in that case, he predicted that it would be better for them to stay in the forested valley than in the snowy plain. As the weather grew darker, he and a few of his colleagues made it to Chardavol, but others were

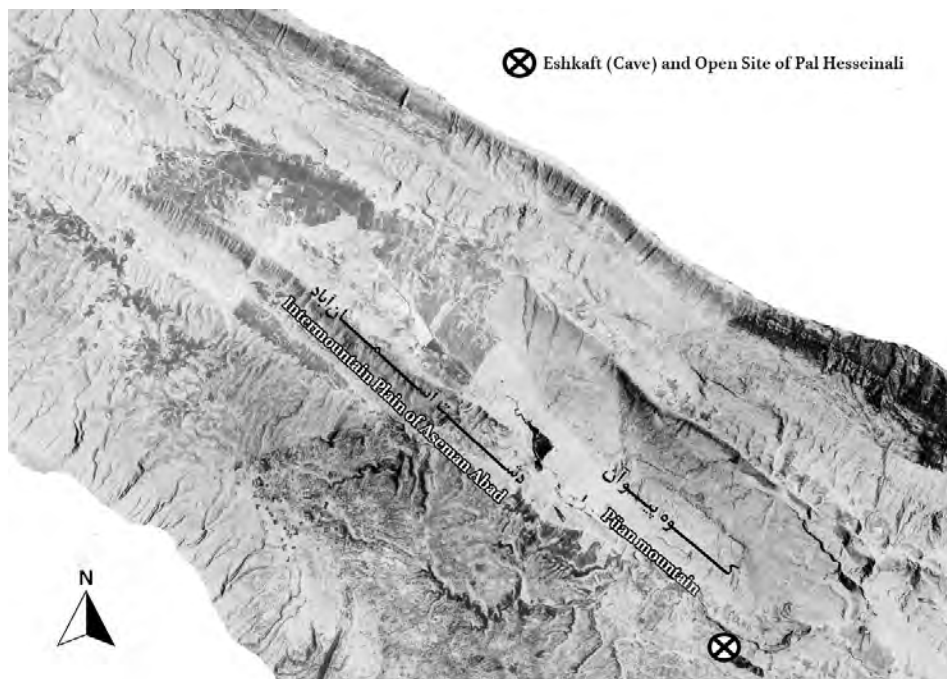
overtaken by night and had to stop among the trees. The Aseman Abad and Chardavol plains form the border regions of Lorestan and Kermanshah (Rawlinson, 1839).

Until many years ago, many regions of Ilam province were unknown in terms of Paleolithic research except the Hollailan Plain that was examined by a Danish archaeological team. However, several sites from that period were identified and introduced in studies and research conducted in recent years (Darabi *et al.*, 2011). In 2003, the author explored the mountainous and forested areas of the Intermountain Plain for the first time, during which, sites and settlements from different periods were identified and studied (Nourallahi, 2003 and 2005). The results of this study showed that the slopes and caves of this region had evidence from the Lower Paleolithic to the Upper Paleolithic periods and even later. In this article, the main focus is on a cave (Fig. 1) and an open site located nearby, which, considering the presence of chert and flint rock formations on the surface level, as well as scattered tools near these rocks, appears to have been a place for obtaining stone and making tools during the Paleolithic era.

Pal Hesseinali Open Site

One of the Paleolithic sites is located 2.1 kilometers southeast of the village of Gadmeh, on the southern slope of Püan (Peoan - a rocky wall in the north), covered with oak trees. Its distance from Pal Hesseinali to the northeast is about 300 meters. The surface of this open site is rocky and covered with oak trees,

¹ Until about 60-70 years ago, the mountains around this village had wild grapes (Mayv). The reason for the name of this village goes back to the existence of these trees (Mayv+e+lah=grapes place).



Map 1. The Geographical Location of Eshkaft (Cave) and Open Site of Pal Hesseinali

located at a geographical position of $33^{\circ}48'52.70''N$, $46^{\circ}30'51.90''E$, and at an altitude of 1273 meters above sea level. The Aseman Abad River passes about 750 meters south of this site and has a relatively complete view of the east of Aseman Abad. Also, evidence of winter settlements of nomads can be seen 200 meters to its west and 300 meters to the east. In the east of this open site and about 150 meters south of Pal Hesseinali, there used to be a spring until a few decades ago, but there is no trace of it today. The dimensions of this open site are approximately 150 meters by 170 meters (Figs. 2-3). During a surface survey of the area next to the chert rock formations, several stone tools were collected (Figs. 4-6). These include a chopper (No. 1), a point (No. 2), a triangular flake scraper (No. 4), a broken blade (No. 3), and a small ovoid Acheulean hand axe (No.

5) (Fig. 7). Similar examples of these types of hand axes have also been found in Hollailan (see Mortensen, 1974 and Darabi, 2011). By examining the chert rocks, it was determined that chert comes in white and gray colors, as well as gray and white with red veins. The use of natural flint veins for making hand axes during the Lower Paleolithic period has been reported from the Pal Barik site (Mortensen, 1974). All of these tools were made using percussion techniques, except for No. 2, which was probably made with the Levallois technique.

Eshkaft (Cave) of Pal Hesseinali

On the southern rocky wall of the Püan mountain range, which stretches from northwest to southeast, at a geographical position of $33^{\circ}48'55.99''N$, $46^{\circ}31'0.88''E$, and an altitude of 1332 meters above sea level, there is a cave located near the



Fig. 1. Open Site of Pal Hesseinali



Fig. 2. Open Site of Pal Hesseinali

open site of Pal Hesseinali. Until a few years ago, this cave was used as a shelter for sheep and livestock during the winter, and its traces can be seen on the cave floor. The mouth of the cave is 3 meters

high, with a height of 4 meters inside and a width of 4.7 meters, and a depth of 15.7 meters. Its height from the surrounding terrain (plain) is about 120 meters (Fig. 8). The mouth of the cave faces south and



Fig. 3. Chert on the Surface of Open Site of Pal Hesseinali



Fig. 4. Chert on the Surface of Open Site of Pal Hesseinali

is gently sloping towards the valley floor, covered with oak trees. Access to it is through a road on the west. Today, part of the cave's ceiling has collapsed, resulting in surface remains of just more than 10

meters. In the small valley located to the west of the cave mouth, there are remains and traces of the winter settlement of nomads (Zemgah) (Figs. 9-11). Several broken pottery pieces and a small flint



Fig. 5. Stone Tools of Open Site of Pal Hesseinali

stone with signs of heat were found next to these Zengahs (No. 15). Given their dark brown color on a beige background,

which is embossed both inside and out, another piece of pottery with clay glaze on a beige background likely belongs to

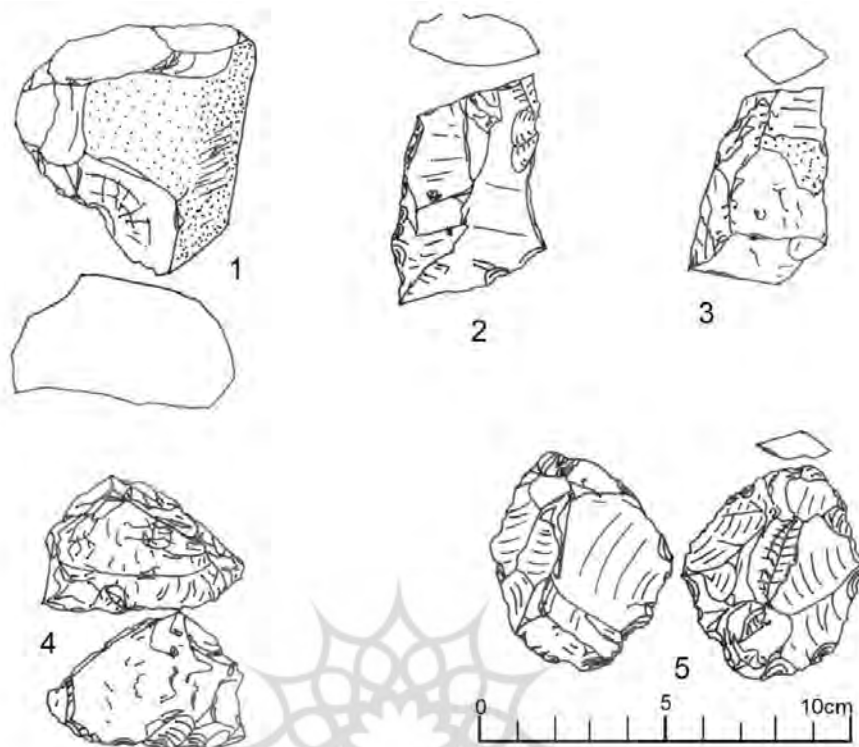


Fig. 6. Stone Tools of Open Site of Pal Hesseinali

1. Greenish Yellow; 2. White Flint; 3. White Flint; 4. White Flint; 5. White Flint (Lower Paleolithic)

the Middle Copper Age (No. 9 and 10).

Due to the collapse of the cave's roof, nothing was found beyond a radius of ten meters around the mouth and two small tools, including a finger scraper made of transparent silica (No. 23) and a broken blade (No. 18). Inside the cave, a pile of broken pottery with chickpea paste was found, which belongs to a historical period (Fig. 11).

About 10 meters south of the mouth, 23 more tools were found that include flakes with some cortex (No. 3, 12, 14), a single side scraper (No. 13 and 21), a notched tool (No. 17), raclette tools (No. 5, 6, 19), simple flakes (No. 24, 26, 27), a pointed tool (No. 16 and 25), burin scraper (No. 1, 2, 4), and a radial core

stone (No. 20). These tools are made of chert and quartzite (Fig. 12).

Conclusion

The Pal Hesseinali cave was likely used as a seasonal residence, especially considering the cold climatic condition of the region. Therefore, it can be said that this cave was used from late winter to early spring, which is consistent with the pattern of the nomadic use of this cave, starting from mid-February (coinciding with the beginning of the Kurdish spring) when they returned from the warm regions with their livestock. At this time, the weather begins to warm up but still remains cold, so this settlement pattern can also be suggested for this



Fig. 7. Pal Hesseinali Cave



Fig. 8. Pal Hesseinali Cave

cave. One of the reasons for choosing this location is that the southern slopes of Pūan are warmer than other parts due to their sun exposure and that they

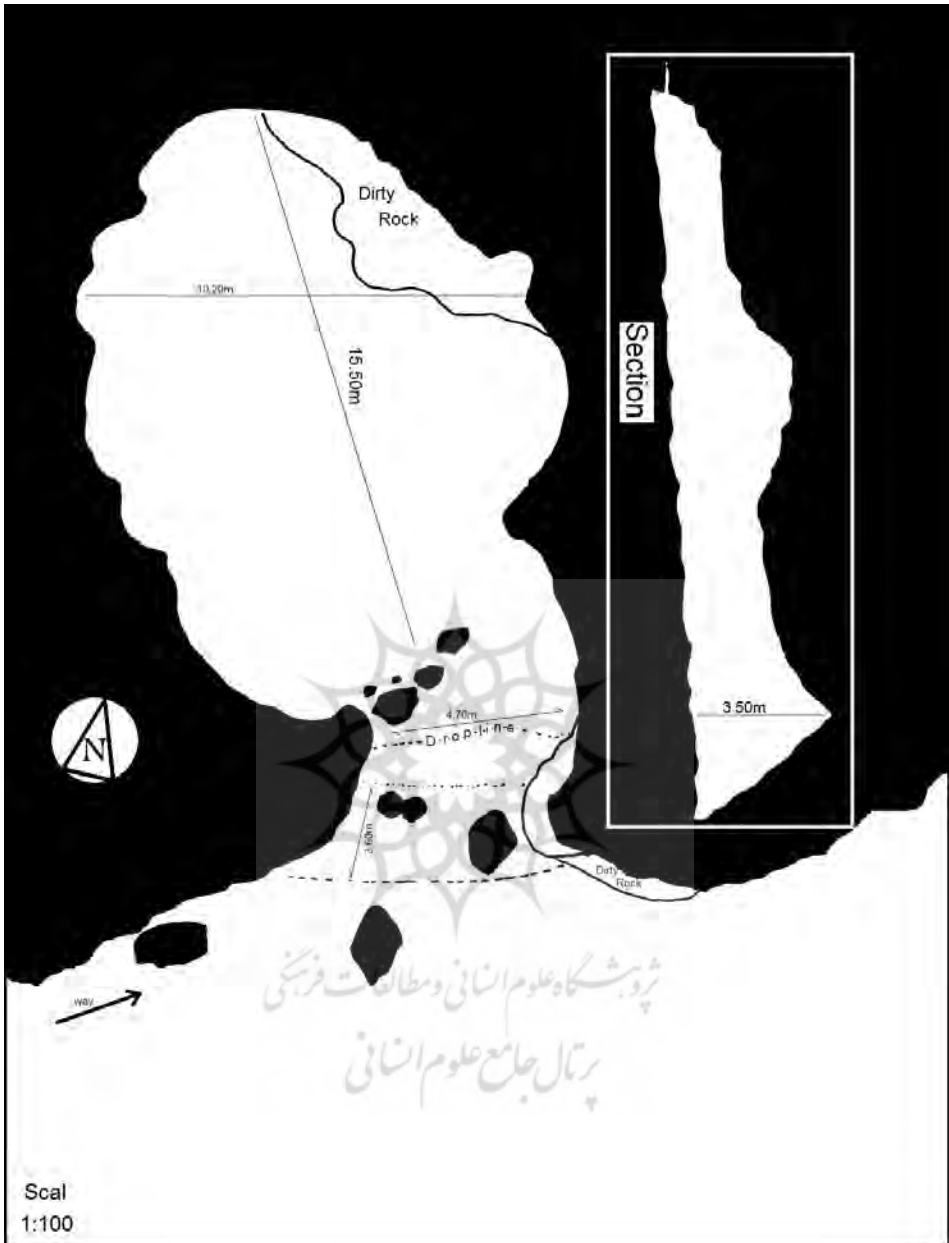


Fig. 9. Pal Hesseinali Cave



Fig. 10. Pottery Sherds from Pal Hesseinali Cave

have more biodiversity. On the other hand, since nomads could easily access forests, plains, and water sources, this cave was good for sheltering due to



Map. 2. Plan of Pal Hesseinali Cave

passages of wild animals. The study of stone tools and flakes as well as pottery found around and inside the cave shows that the site was likely used from the Middle Paleolithic period onwards, as it

has remains from different periods and their time range indicates that it was still being used by nomads until about 100 years ago.

As mentioned, the tools found in

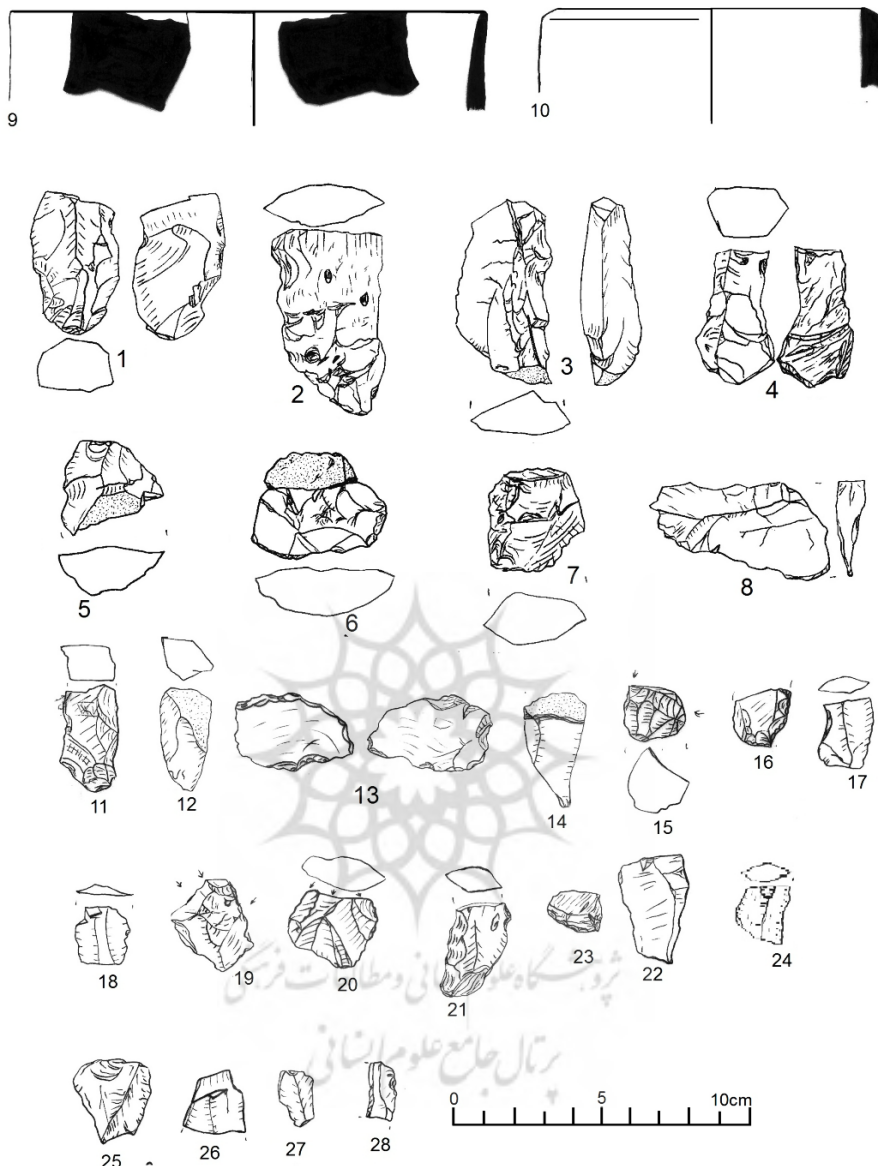


Fig. 11. Pal Hesseinali Cave Tools: 1. White Flint (Middle Paleolithic); 2. Gray Flint (Middle Paleolithic); 3. White Flint (Middle Paleolithic); 4. White Flint (Middle Paleolithic); 5. White Flint (Middle Paleolithic); 6. White Flint (Middle Paleolithic); 7. White Flint (Middle Paleolithic); 8. White Flint (Middle Paleolithic); 9. Buff ware, soft sand, It is made of a buff clay, using a potter's wheel, patterned inside and outside all black (Middle Chalcolithic); 10. Edge, mud glaze, soft sand, It is made of a buff clay, using a potter's wheel (Middle Chalcolithic); 11. White Flint (Upper Paleolithic\ Epipaleolithic); 12. White Flint (Upper Paleolithic\ Epipaleolithic); 13. Gray Flint (Upper Paleolithic\ Epipaleolithic); 14. Gray Flint (Upper Paleolithic\ Epipaleolithic); 15. Microlith Core, Brown (Chalcolithic); 16. White Flint (Upper Paleolithic\ Epipaleolithic); 17. White Flint (Upper Paleolithic\ Epipaleolithic); 18. Green Flint (Upper Paleolithic\ Epipaleolithic); 19. White Flint (Upper Paleolithic\ Epipaleolithic); 20. White Flint (Upper Paleolithic\ Epipaleolithic); 21. White Flint (Upper Paleolithic\ Epipaleolithic); 22. White Flint (Upper Paleolithic\ Epipaleolithic); 23. Silica (Upper Paleolithic\ Epipaleolithic); 24. White Flint (Upper Paleolithic\ Epipaleolithic); 25. White Flint (Upper Paleolithic\ Epipaleolithic); 26. White Flint (Upper Paleolithic\ Epipaleolithic); 27. White Flint (Upper Paleolithic\ Epipaleolithic); 28. Gray Flint (Upper Paleolithic\ Epipaleolithic);

and around this cave include small flint blades, drills, flakes, unifacial knives (blades), and core stones made of silica and chert. These tools appear to have been used for gathering plants and hunting smaller animals. Near the Pal Hesseinali cave is an open site called Pal Hesseinali, which is covered with rocks and boulders made of chert and

basalt in different colors. Alongside them are various rough tools such as axes, pounders, hand chisels, etc., which are widely visible and have been discovered in the area. This indicates that this open site, along with other places with chert stones in eastern Asemān-Abād, was used for making tools during the Lower Paleolithic and the subsequent periods.

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