Blanks and chunks - the lithic assemblage of the Middle to Upper Paleolithic site of Feldberg "Steinacker"

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Overview

The open-air site of Feldberg "Steinacker", south-west Germany, is located in the foothill zone of the Black Forest near Freiburg (Fig. 1). It was formerly known for its rich assemblage of surface finds of mainly Upper Paleolithic age, characterized by the presence of Font-Robert points, gravetteand microgravette implements, burins and endscrapers. The site is situated in the range of deposits rich in high-quality chert material, known as so-called "Bohnerzhornstein", even though their exact location cannot be pointed out yet. As the high number of surface finds at the upper part of the slope reflects the ongoing loss of archaeological substance, four excavation campaigns were conducted between 2018 and 2021 in order to investigate preservation across the site as well as to yield lithic finds from datable stratigraphic contexts.



Archaeological surveys

In 2021 and 2022, additional archaeological surveys contributed to the picture within the direct vicinity. The area surveyed 2021 west to the site yielded mostly natural remains, probably connected to the local deposits. Knapped lithic finds only made up 28 % of the assemblage. In contrast, the survey assemblage east of the site, which is still under study, more reflects the situation at the main site,

In addition, magnetic surveys as well as archaeological and geological prospections add to the research of the site.

> Figure 1. Aerial Photo of the site with main investigation area of magnetic survey, excavation and surface concentrations (pink). Figure 2. Excavated trenches and surface find concentration.

concerning higher numbers of knapped lithics and laminar blanks. Still, the number of tools is not as high as at the surface concentration.





Figure 3. Finds from surface concentration. Top: Fragment of Font-Robert point found in 2021 near trench 8. Right: 1 Bidirectional blade core, 2-3 crested blade, 4 partially backed blade, 5 shouldered endscraper, 6 Burin on natural plane, 7 Endscraper with unilate ral retouch, 8 possible peduncle fragment of a Font-Robert point. Photos by M. Bradtmöller, Illustrations by A. Calvo.



The trenches cover a transect with a complex topographic situation (Fig. 4). The northernmost profiles show the continuous destruction of the upper Pleistocene horizons by ploughing and other processes; the lower part of trench 1 contains high numbers of lithic chunks as a result of thermal pressure, dating to 127 ± 10 ka. The area of the southernmost trenches can be topographically characterized as a mound with a complex succession of different palaeosols, attributed to a 10 m wide ridge running in NE-SW direction, situated between two Pleistocene (palaeo-) washouts. Intact (in situ) preservation for the Mid-Upper Palaeolithic can be documented in trench 8. Orientation of finds as well as surface preservation attest that the lithics are found partly in situ, while some parts of the stratigraphy are disturbed by periglacial processes.

Site function

Within the southern trenches 2, 8, 9 and 10 with preserved loess layers (Fig. 4-5), finds can be associated with occupations mainly of Gravettian age. The assemblage shows characteristics of a knapping site, aiming for the production of long regular blades/bladelets, including prismatic cores (Fig. 7). The dominance of local raw materials emphasizes the role of acquisition at the site. In contrast, artefacts of Middle Paleolithic layers are made out of other raw materials such as quarzite (Fig. 8.2). This indicates a change in site function or mobility throughout the periods. Further differenciation of technological differences as well as characterization of nonlocal raw material remains a topic of future research.





ses 2662 finds from layers of Middle to Upper Paleolithic date (Table 1). In line with the surface finds, unmodified blanks predominate, while modified pieces are generally scarce. The number of natural chunks due to thermal pressure is quite

Figure 5. Lithic finds projected onto the north profile of caterpillar trench 4, trenches 8 and 2. Trench 10

Figure 7. Blanks and core from trench 8. 1 Blade core, 2-4 blades, 5 overshot blade. Photos by L. Bauer.

Trench	Knapped lithic remain		Other lithic remain		Thermal lithic remain		Total
	n	%	n	%	n	%	
1	321	25%	78	6%	880	69%	1279
BS1	2	40%	3	60%		0%	5
BS2	1	100%		0%		0%	1
BS4	93	65%	4	3%	45	32%	142
8	282	71%	47	12%	70	18%	399
2	258	43%	24	4%	314	53%	596
6	15	56%	2	7%	10	37%	27
9	28	60%		0%	19	40%	47
10	55	65%	23	27%	6	7%	84

Table 1. Number of lithic finds by trenches. Higlighted in blue are the trenches with highest numbers of finds. BS = catterpillar trench.





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