

The Neolithic Settlement Landscape of the Southeastern Swabian Alb (Germany)

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Figures 1–2, 5–8, 11, 21

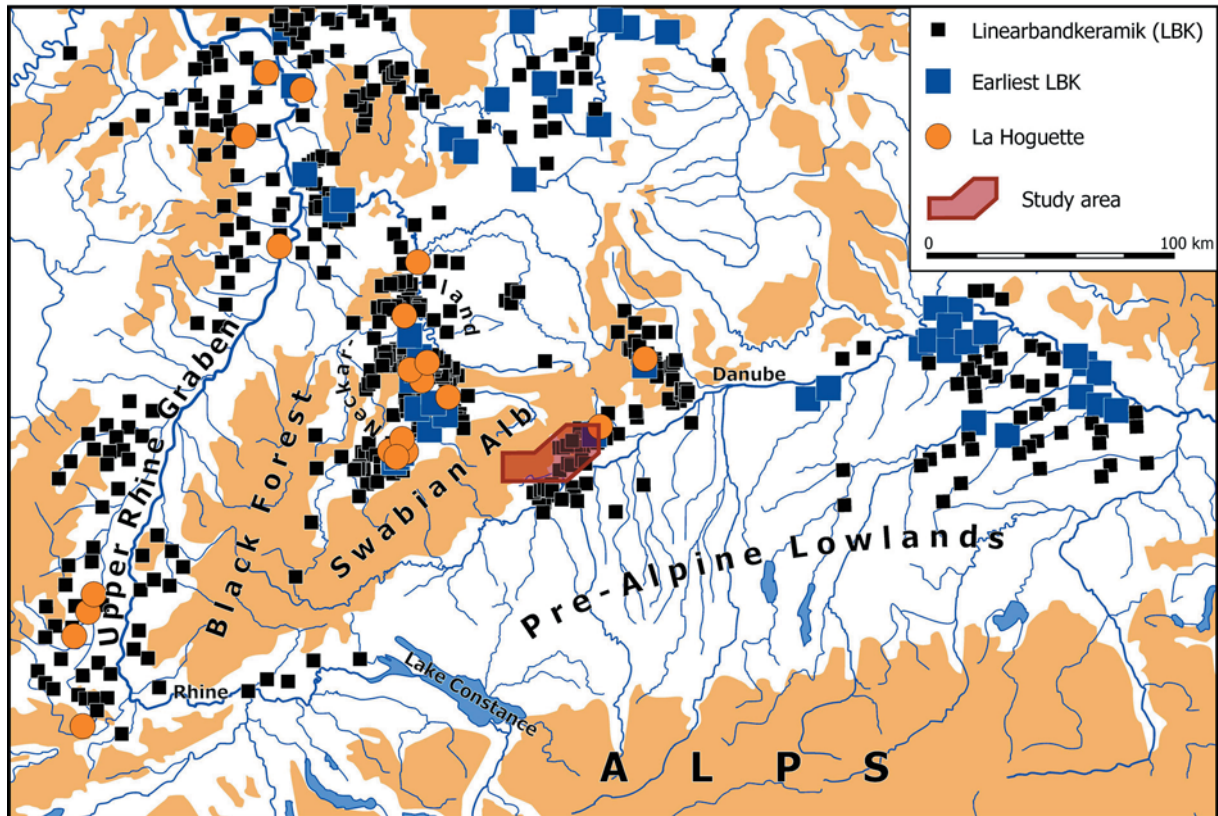


Fig 1: Location of the study area and distribution of Early Neolithic (LBK and La Hoguette) sites in Southern Germany. Major settlement regions include the Neckarland, the Upper Rhine Graben, the Main area, the Danube valley in Lower Bavaria, and parts of our study area.

Abb. 1: Lage des Arbeitsgebiets und Verbreitung frühneolithischer Fundstellen (LBK und La Hoguette) in Süddeutschland. Hauptsiedelgebiete sind das Neckarland, der Oberrheingraben, das Maingebiet, das Donautal in Niederbayern sowie Teile unseres Arbeitsgebiets.

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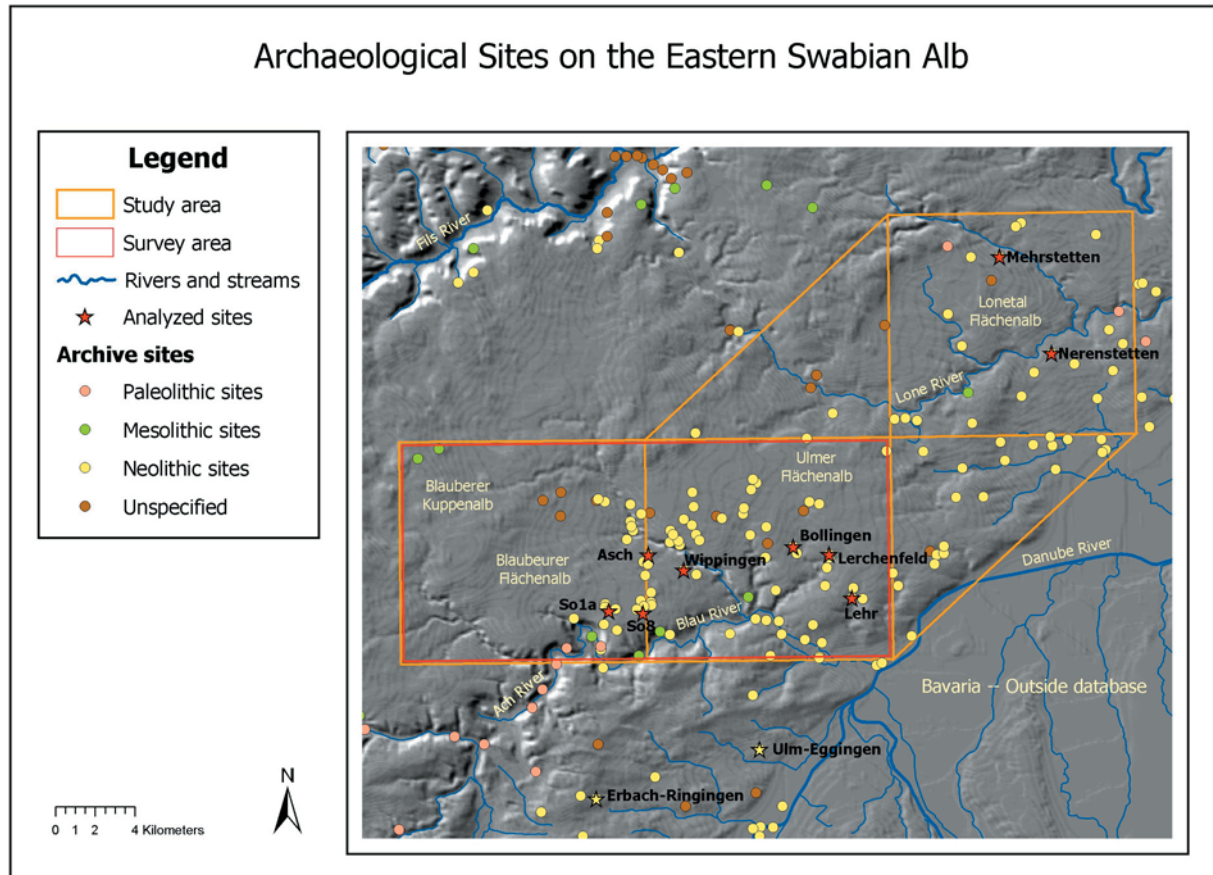


Fig. 2: Archaeological sites on the South-eastern Swabian Alb. Paleolithic deposits are almost exclusively known from cave sites in the Ach, Blau, and Lone river valleys. A few Mesolithic sites are known from either valley locations or small surface artifact scatters on the Alb plateau. The rich Neolithic archaeological record is dominated by surface artifact scatters in Flächenalb upland locations. The extensions of the study and survey areas are defined by local topographical maps. This map and fig. 6 and 11 include sites from the literature and LDA archives with exact enough location information to allow mapping. Coverage outside our research area is not complete.

Abb. 2: Archäologische Fundstellen auf der südöstlichen Schwäbischen Alb. Paläolithische Ablagerungen sind ausschließlich aus Höhlenfundstellen im Ach-, Blau- und Lonetal bekannt. Die wenigen mesolithischen Fundstellen liegen entweder ebenfalls in den Flusstälern oder auch auf der Albhochfläche. Die reiche neolithische Fundüberlieferung wird von Oberflächenfundstreuungen auf der Flächenalb bestimmt. Die Ausdehnung des Untersuchungs- und Begehungsbereichs orientiert sich an topographischen Karten (TK25). Diese Karte und Abb. 6 und 11 zeigen Fundstellen aus der Literatur und den Ortsakten des Landesdenkmalamtes, deren Lokalitäten genau genug bekannt sind. Die Kartierung außerhalb des eigentlichen Arbeitsgebietes ist nicht vollständig.

	Blaubeurer Kuppenalb	Blaubeurer Flächenalb				Ulmer Flächenalb			Lonetal-Flächenalb		Legend
	No archeological sites analyzed	Sonderbuch 1a settlement/ raw material extraction?	Sonderbuch 8 settlement	Asch 3 settlement	Wipplingen 1 raw material extraction settlement?	Bollingen settlement	Lerchenfeld settlement	Lehr settlement	Mehrstetten raw material extraction	Nerenstetten settlement	
Elavation m a.s.l.	740 - 800	665	674	630-700 649	651	577	550-660 577	558	520-600 558	515	Buffer zone distances 1 = 500 m 2 = 1000 m 3 = 2500 m
Distance to running water and springs	No running surface water	No running surface water. Deeply incised river valleys 1260 m 1490 m 2820 m 1640 m 530 m? (Bacher hole, artificial?) 1950 m (Lauter spring) 650 m (Kleine Lauter)				No running surface water Deeply incised river valleys 2500 m 4090 m 2910 m 300 m? (2 water holes, artificial?) on site? (Reppenried spring) 300-800 m? (Several springs?)			Very little running surface water 510 m 670 m		
Slope	Slightly rolling landscape without deeply incised river valleys	Nearly flat with deeply incised river valleys				Nearly flat with deeply incised river valleys			Nearly flat, except Lone valley		< = 3 % 3-10 % 10 - 20 % 20 - 30 %
Temperature (numbers are annual means in °C)	Moderately cold (6.0-6.5°C)	Cool (6.5-7.0°C)				Cool to moderately warm (6.5-8.5°C)			Moderately cool to moderate (7.0-8.0°C)		Uncalculated Moderately cool Moderately warm Cool Moderate
Soils	Predominantly stony & thin	Predominantly stony and (moderately) deep				Predominantly (moderately) deep with few or no stones			Predominantly (moderately) deep with few or no stones		Few or no stones, mostly deep Stony, moderately deep to deep Loam & sand Loam Loam-sand altern. with loam Loam, altern. with loam on top of clay Silt alternating with loam Loam on top of clay Loam Loam, altern. with loam on top of clay Loam & clay Loam on top of clay Very stony, shallow to moderately deep Town
Agricultural potential	Very low to low	Low				Moderate			Moderate to high		Potential < 1 Potential 5-7 All warmth classes Warmth class 3-4 Potential 3-5 Warmth class 3-4 Warmth class 5-7 Uncalculated
Chert raw material	Some	Highly abundant < 1 km < 1 km < 1 km on site				Little 5-10 km 5-10 km 5-10 km			Few concentrations on site 5-10 km		
Archaeological record	No Neolithic sites known	- Many LBK to later Neolithic rich surface lithic scatters - Few sites with subsurface features				- Many LBK to later Neolithic rich surface lithic scatters - Some (settlement) sites with subsurface features			- Many LBK and Middle Neolithic surface scatters and sites with subsurface features		
Hypothesized use / importance in the Neolithic	No known evidence OUTLAND USE? PASTURE?	CHERT RAW MATERIAL EXTRACTION SETTLEMENTS?				AGROCLTURE / SETTLEMENTS			AGROCLTURE / SETTLEMENTS & CHERT RAW MATERIAL EXTRACTION		

Fig. 5: Environmental conditions in geo-
graphic areas and habitat use zones of
nine selected Neolithic sites.

Abb. 5: Naturräumliche Bedingungen in den
Teillandschaften des Arbeitsgebiets und po-
tentiellen Einzugsbereichen von neun ausge-
wählten Fundstellen.

Agriculture Potential within Habitual Resource Zones for Analyzed Sites

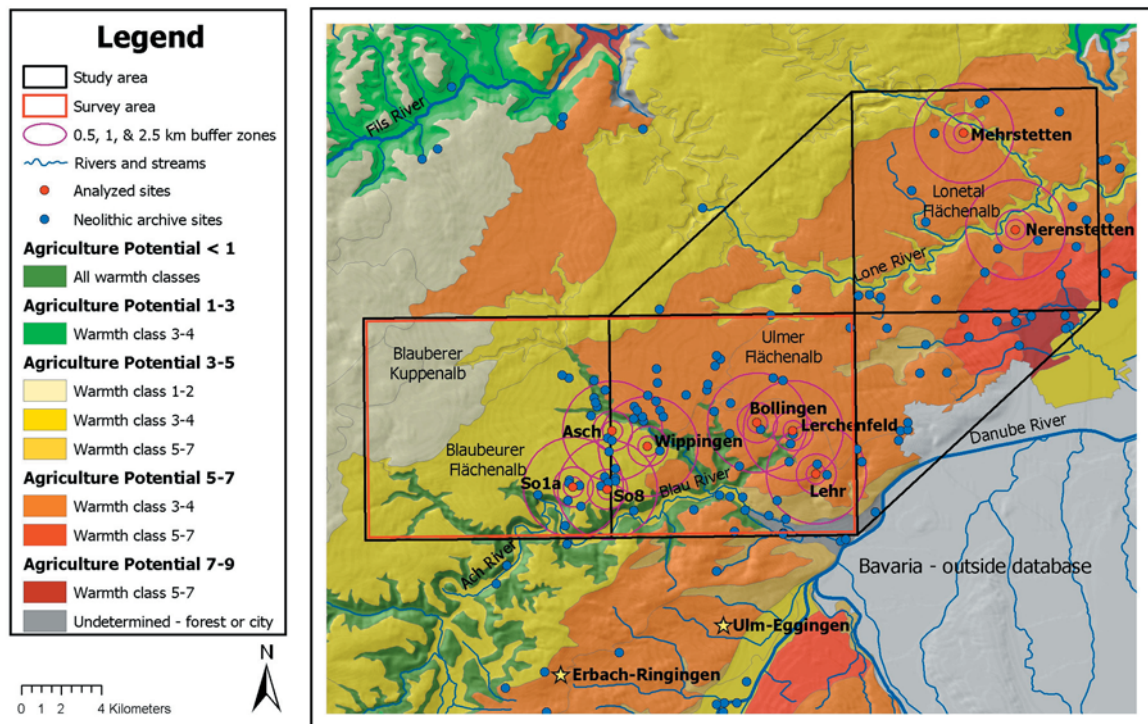


Fig. 6: Agricultural potential within habitual resource zones for the analyzed sites. Lower numbers refer to lower agricultural potential and temperatures. Natural agricultural productivity increases gradually from the Blaubeurer Kuppenalb to the Lonetal-Flächenalb.

Abb. 6: Natürliche Eignung für Ackerbau in den potentiellen Einzugsbereichen der untersuchten Fundstellen. Höhere Zahlen stehen für bessere Eignung und höhere Temperaturen. Die natürlichen Bedingungen für Ackerbau verbessern sich kontinuierlich von der Blaubeurer Kuppenalb in Richtung Lonetal-Flächenalb.

Natural Chert Sources: Survey Results and Published Sources

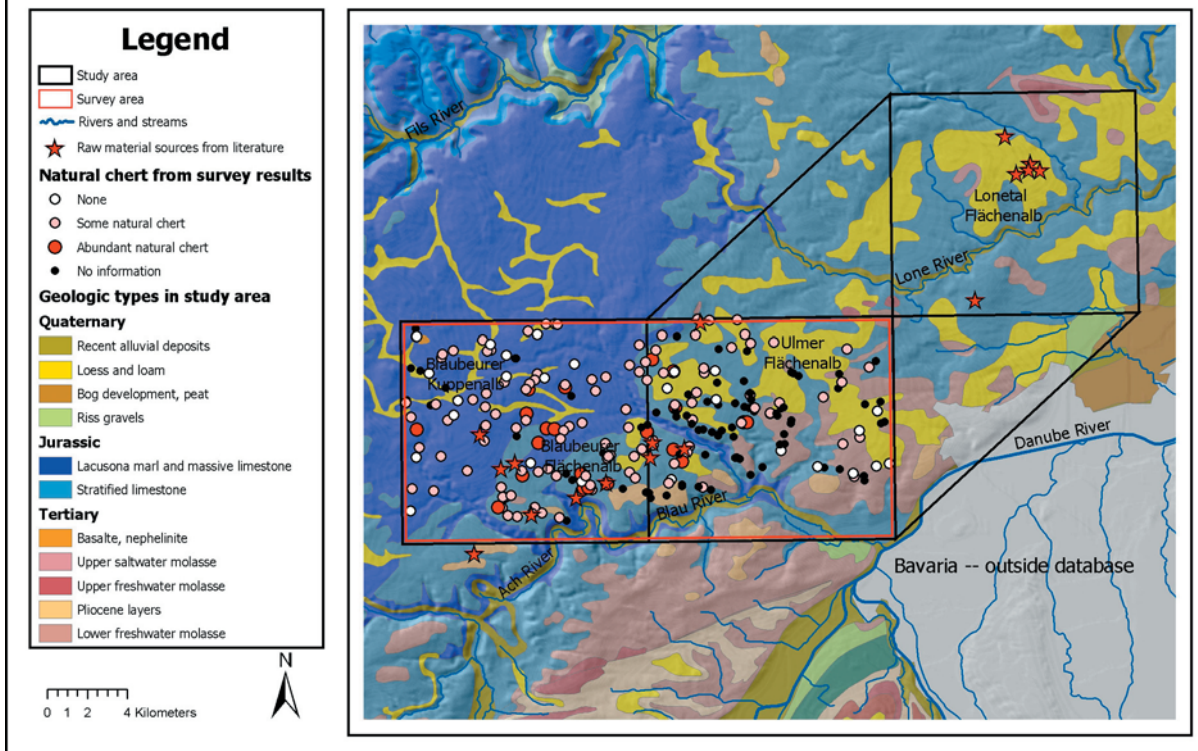


Fig. 7: Natural chert sources known from plowzone survey and published sources. Jurassic chert is most abundant on the Blau-beurer Flächenalb.

Abb. 7: Natürliche Hornsteinvorkommen: Ergebnisse der Feldbegehungen und publizierte Vorkommen. Jurahornsteinvorkommen konzentrieren sich vor allem auf der Blau-beurer Flächenalb.

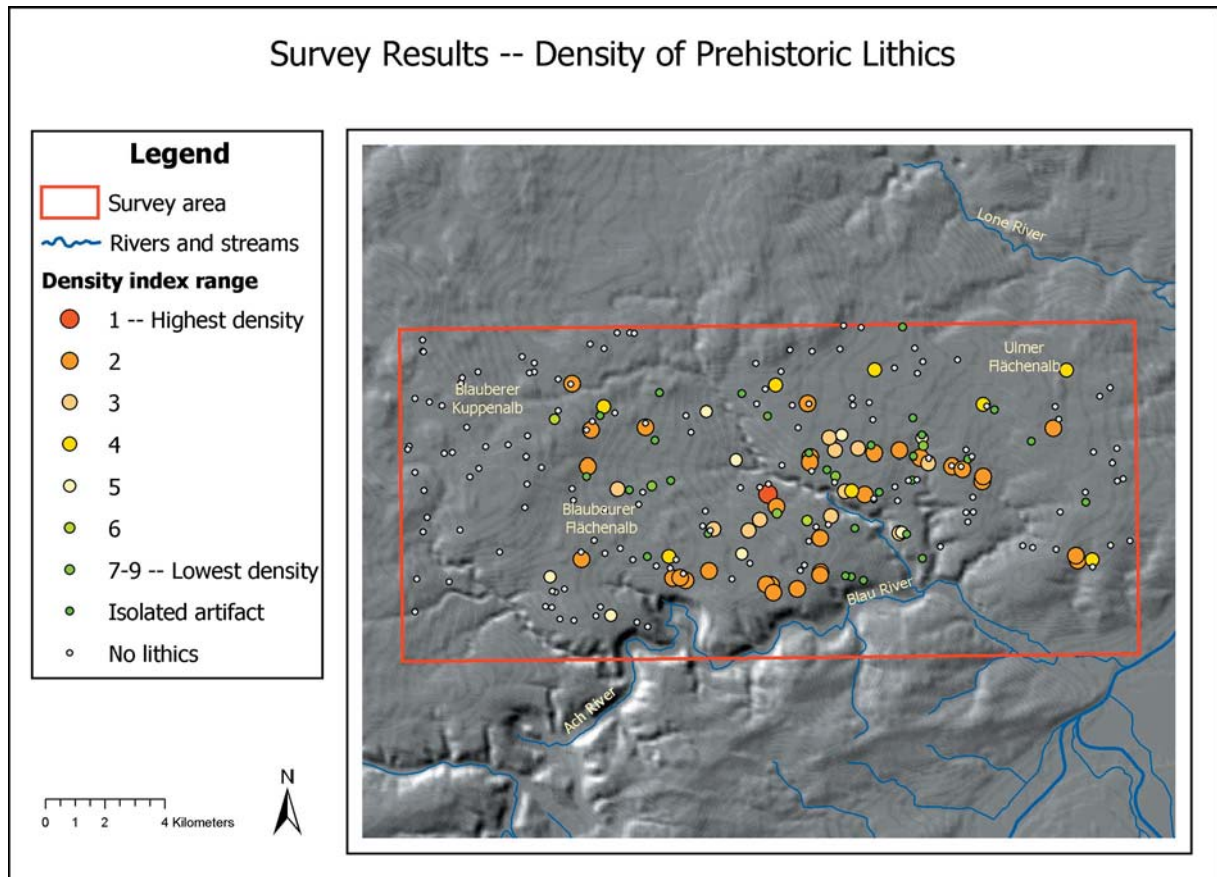


Fig. 8: Survey results: Density of prehistoric lithics. The index of surface find density (after Drafehn et al. 2003) is calculated as field size in hectares divided by number of prehistoric lithics per survey pass.

Abb. 8: Ergebnisse der Feldbegehungen: Funddichte von Steinartefakten. Der Funddichteindex (nach Drafehn et al. 2003) berechnet sich aus der Feldgröße in Hektar / Anzahl der Steinartefakte pro Begehung.

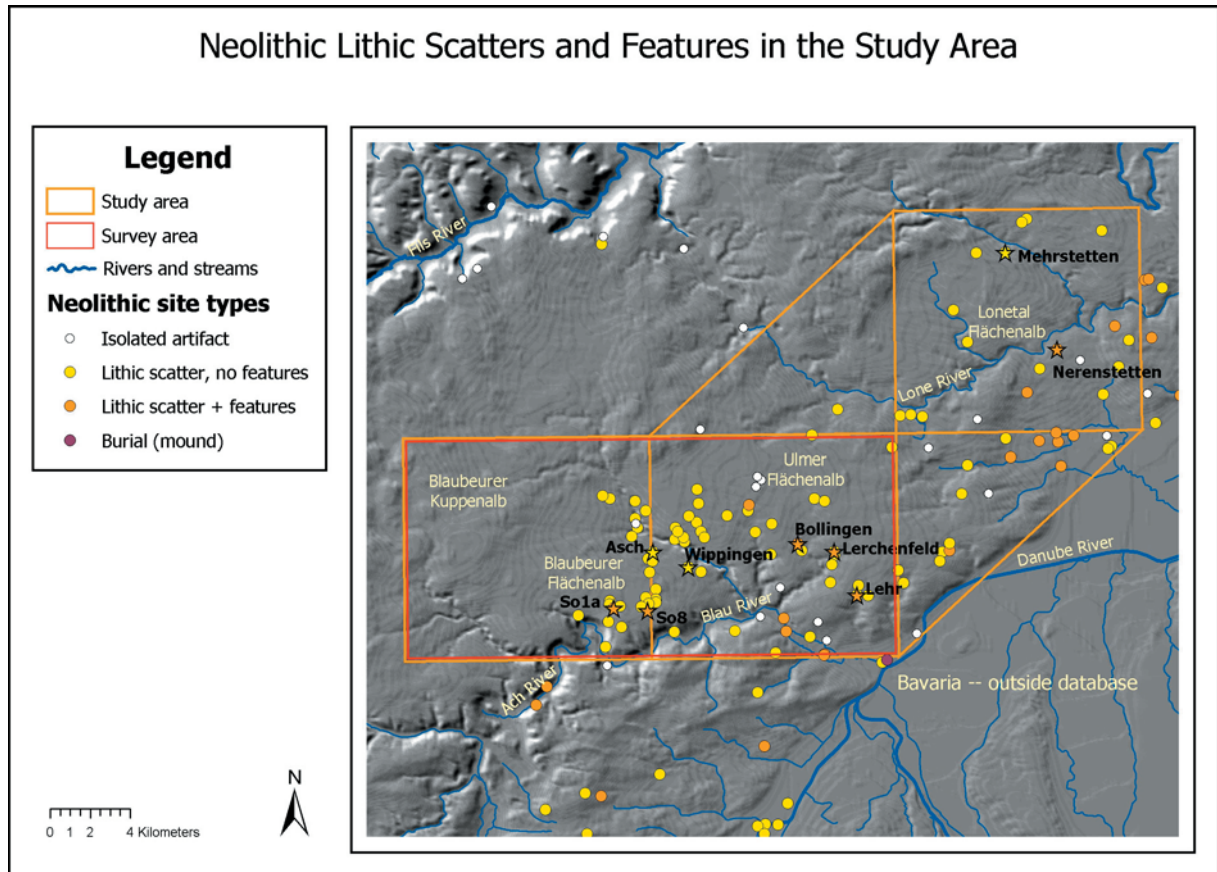


Fig. 11: Neolithic sites in the study area. The Blaubeurer and Ulmer Flächenalb are dominated by surface scatters while more sites with subsoil features are known from the Lonetal Flächenalb.

Abb. 11: Neolithische Fundstellen im Arbeitsgebiet. Während von der Blaubeurer und Ulmer Flächenalb hauptsächlich Oberflächenfundstellen bekannt sind, konnten auf der Lonetal-Flächenalb mehr Fundstellen mit Bodenbefunden nachgewiesen werden.

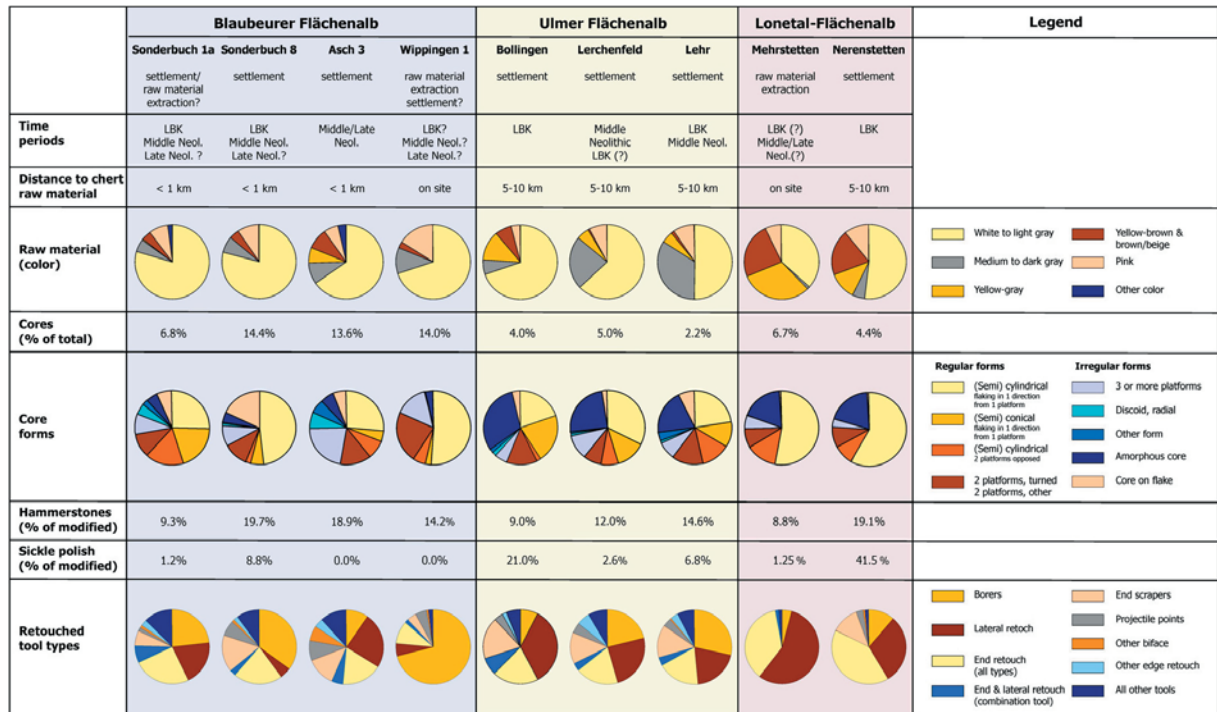


Fig. 21: Comparison of selected lithic attributes.

Abb. 21: Ausgewählte Eigenschaften der neun Steinartefaktinventare im Vergleich.