

GERLAND (1530 m) AND LA MARE (1610 m), TWO HOLOCENE OPEN-AIR STATIONS AT HIGH ALTITUDE IN VERCORS (WESTERN FRENCH ALPS)

First Results From the Study of Lithic Technology

Where The Wild Things Are:
Recent Advances in Palaeolithic and Mesolithic Research
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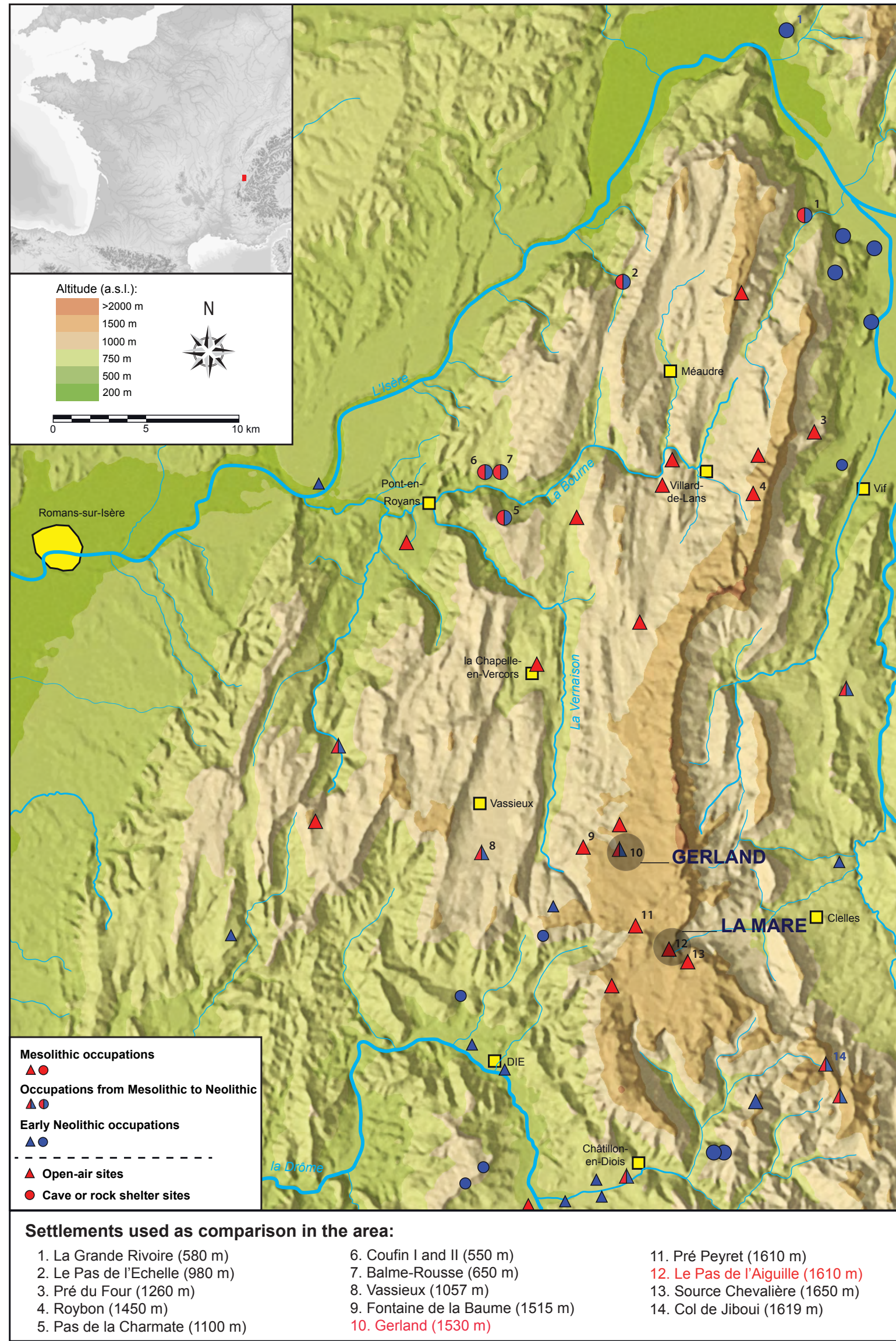


Figure 2 – Map of Vercors with Mesolithic and Early Neolithic sites excavated.
(CAD: A. Angelin, Cartography: C. Bernard)

1 - INTRODUCTION & OBJECTIVES:

During the Holocene period, the range of Vercors (figure 1) has been the theatre of multiple human occupations. When Late Paleolithic people used to settle at low range altitude (porch of caves and rock shelters), the end of the Late Glacial is well characterized by a movement of people at high altitude.
For the past three decades, surveys and test excavations made in altitude (above 1400 m. a.s.l.) by different archaeologist such as P. Bintz or R. Picavet, have mostly revealed open-air occupations attributed to Middle Mesolithic mixed with very few sets from Late Mesolithic and Early Neolithic (figure 2).

This work and the preliminary results to follow have been based on the study of lithic industry for the comprehension of modalities of human occupations at high altitude.

2 - MATERIAL FOR STUDY & METHODOLOGY:

Gerland (Grasse-en-Vercors) and La Mare in Pas de l'Aiguille (Chichilienne), both excavated in 1999 and 2005 by R. Picavet and S. Bernard-Guelle were chosen for this study and delivered no less than 2000 lithic artifacts.

In these open-air contexts, it's very important to notice the absence of stratigraphic sequences (figure 3), which make the assemblages very heterogeneous. The first methodological approach of this work is the identification of strong cultural evidence from the study of typological materials. The comparison with very well stratified settlements in the area (however not completely studied: Grande Rivoire, Pas de la Charmate...) is the key for the identification and the understanding of specific prehistoric culture at high altitude.
This typological approach together with the technological study of the different chaînes opératoires make it possible to replace Gerland and La Mare in a chronological and cultural sequence of prehistory of Vercors.



Figure 1 – The plateau of Vercors (Western French Alps).
Picture: C. Bernard

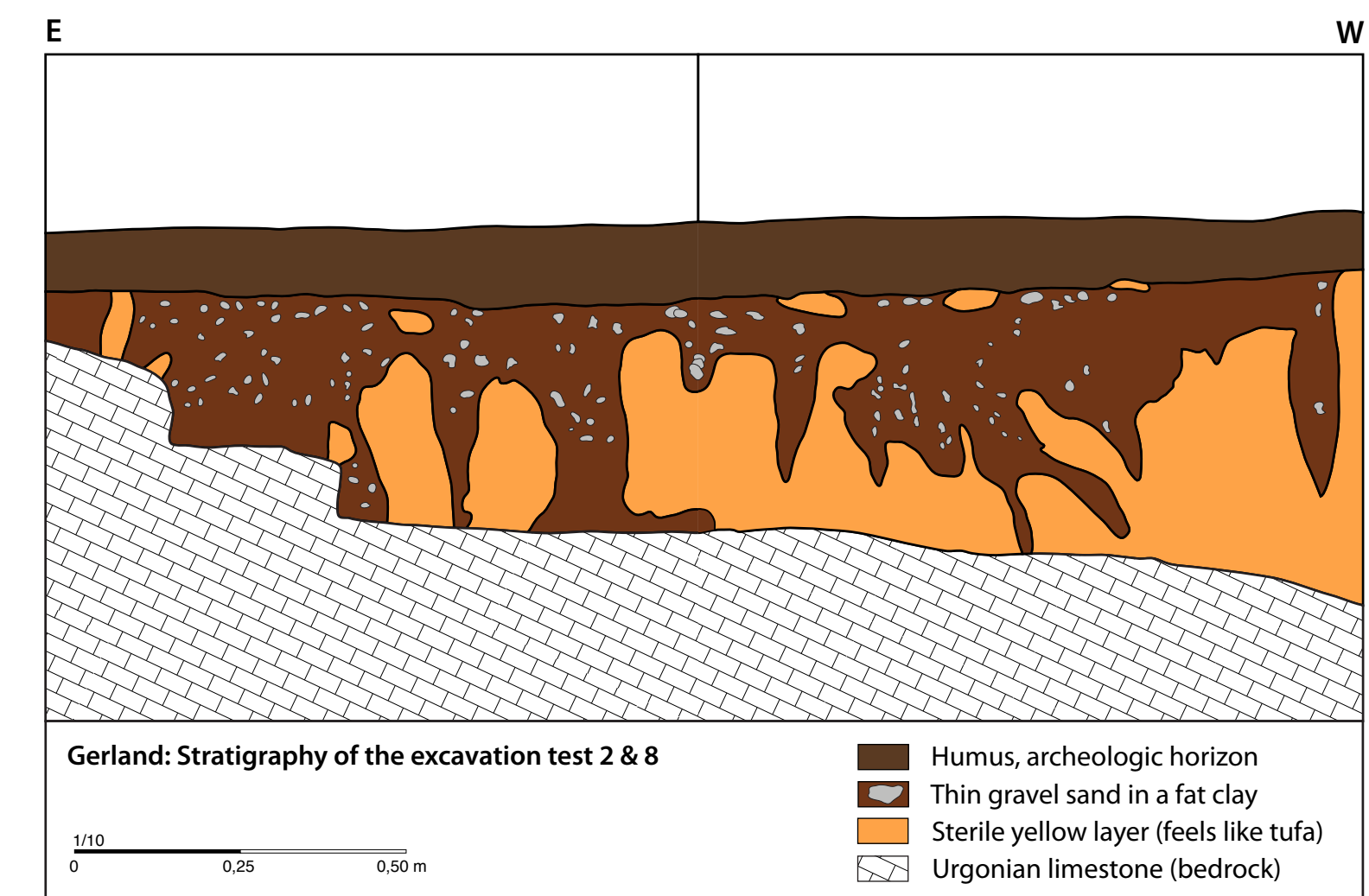


Figure 3 – Stratigraphy observed in the excavation tests 2 & 8 of Gerland. In this context, the sedimentary layer is very thin and the lithic assemblage is very heterogeneous.
(Original drawing: R. Picavet, CAD: A. Angelin)

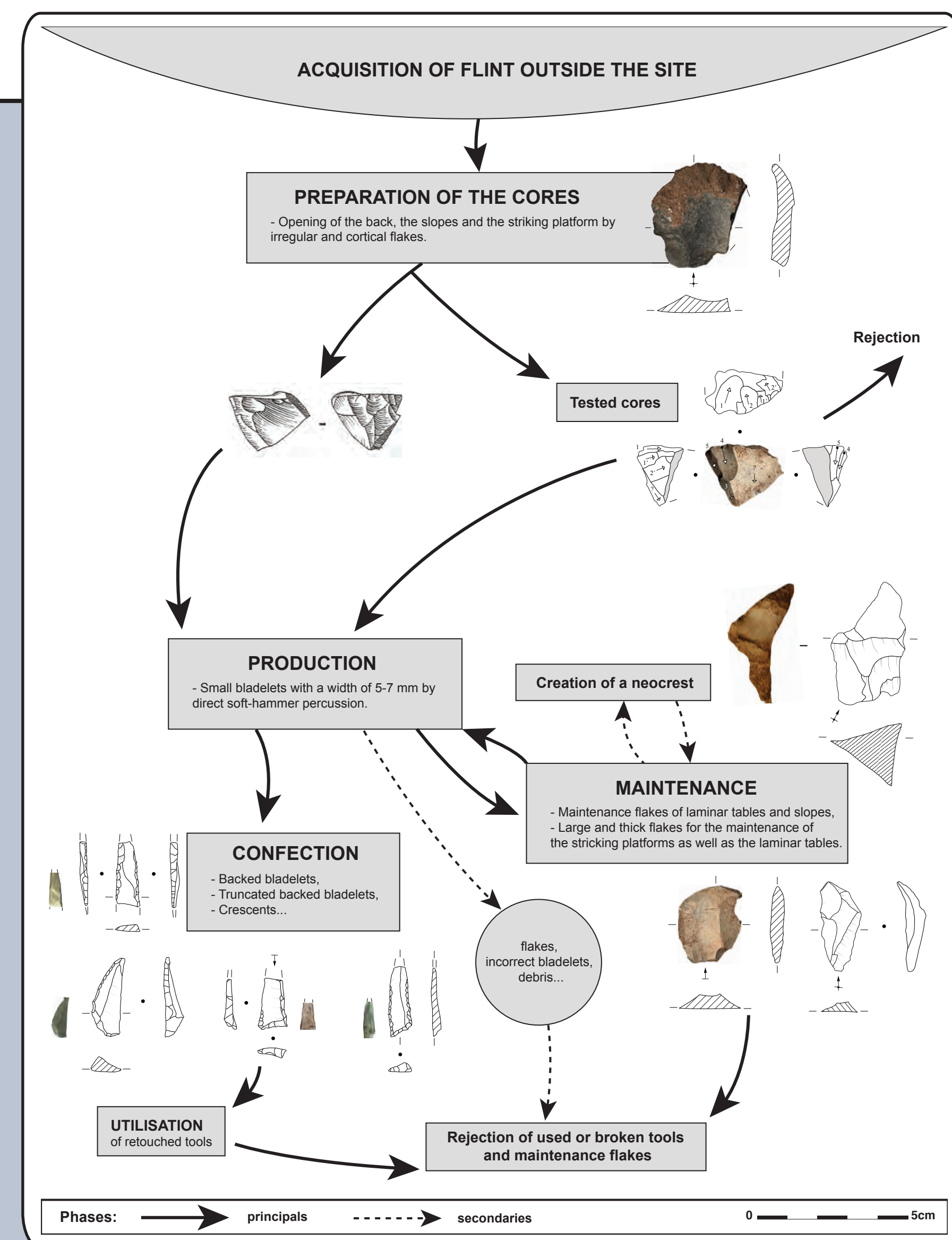


Figure 4 – SET A, Middle Mesolithic débitage

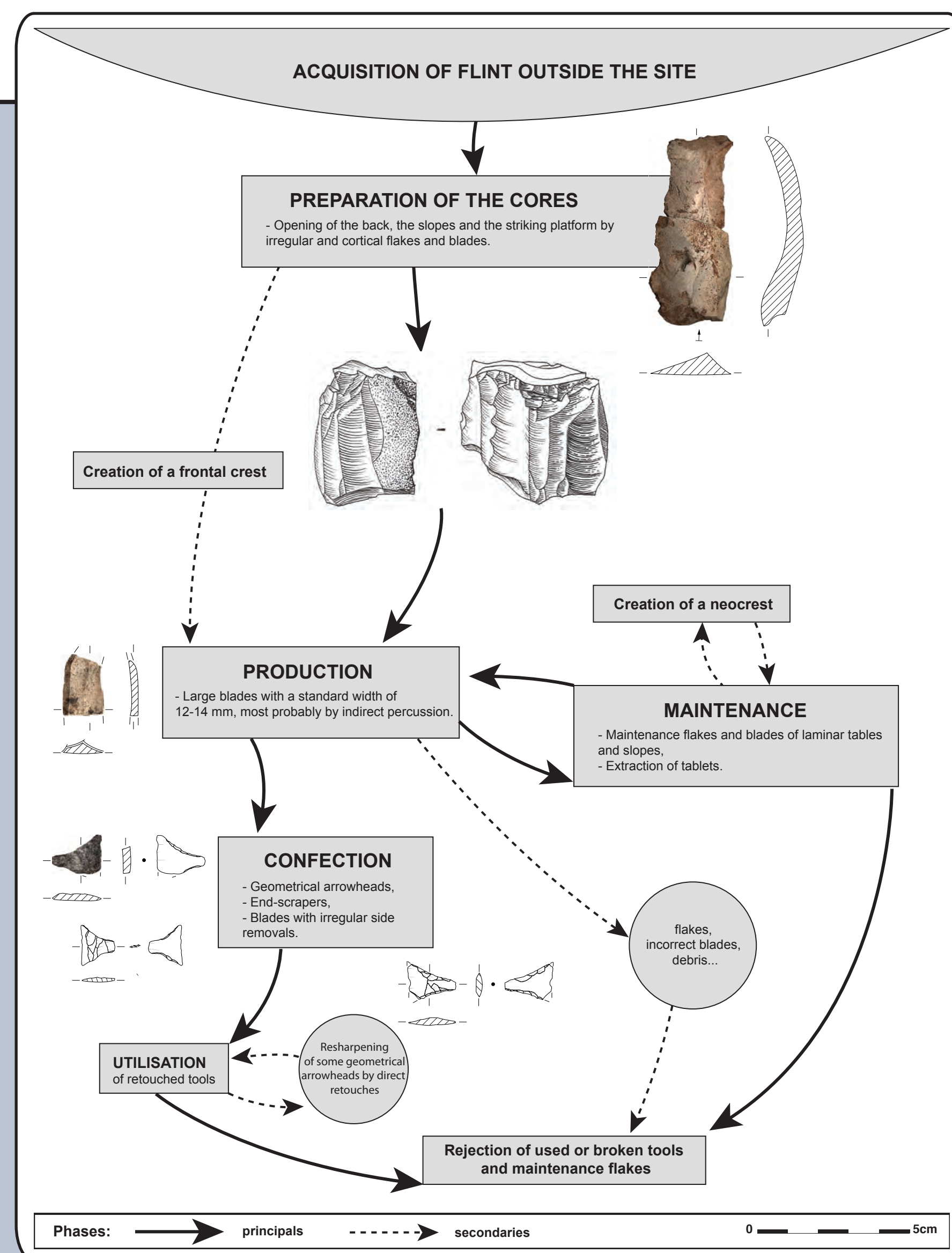


Figure 5 – SET B, Early Neolithic débitage

3 - MAIN RESULTS:

A. GERLAND (FIGURES 4 & 5)

Two different sets of tools have been identified in this station. Technologically, and for both of them, it has been possible to reconstruct a complete chaîne opératoire, from the preparation of the cores to the rejection of used or broken tools:

SET A (figure 4): The technology is geared toward obtaining small bladelets (or microblades), with a width of 5-7 mm by direct soft-hammer percussion from unidirectional bladelet cores, for the creation of microliths (backed bladelets, crescents...). These tools are then probably side hafted in arrows, and are characteristic of a Middle Mesolithic.

SET B (figure 5): The "débitage" is aimed at obtaining blades, with a width of 12-14 mm by indirect percussion from unidirectional blade cores, for the creation of geometrical arrowheads. Arrowheads are manufactured by fractioning of the blade by inflection and by inverse bitruncations, followed, most of the time, by direct low angle retouches. This technology points to an Early Neolithic.

B. LA MARE (FIGURE 6)

In this station the assemblage seems a little bit more homogeneous than in Gerland. However, the presence of both geometrical arrowheads and irregular side removals on blades, which are very similar to Late Mesolithic's "Montbani blades", as well as the absence of a complete chaîne opératoire, do not allow us to attribute the assemblage to a very specific period. However, and unlike Gerland, this set can be referred to a very short period, to a Meso-Neolithic transition.

4. SYNTHESIS (FIGURE 7) & PERSPECTIVES

As we said before (Cf. Introduction), human occupations at high altitude in Vercors were mostly attributed to a Middle Mesolithic. The complete Middle Mesolithic's chaîne opératoire identified in Gerland confirms this data. The comparison with other settlements in the area, such as Pré Peyret (excavations R. Picavet), tells us that this assemblage can be culturally referred to an Early and/or Middle Sauveterrian. Nevertheless, the thirty geometrical arrowheads identified along with a complete chaîne opératoire linked to it, show contacts with Mediterranean Neolithic or very Late Mesolithic groups, themselves (perhaps) in contact with "farmers". Compared to La Grande Rivoire (excavations P.-Y. Nicod and R. Picavet), this set can be attributed to an Early Neolithic period and most probably referred to the Epicardial culture.

The assemblage from La Mare, however, with the absence of a complete chaîne opératoire, cannot be linked to a specific chronological period or culture. It is what we call, in these contexts, a "mixed set", typical from this Meso-Neolithic transition.

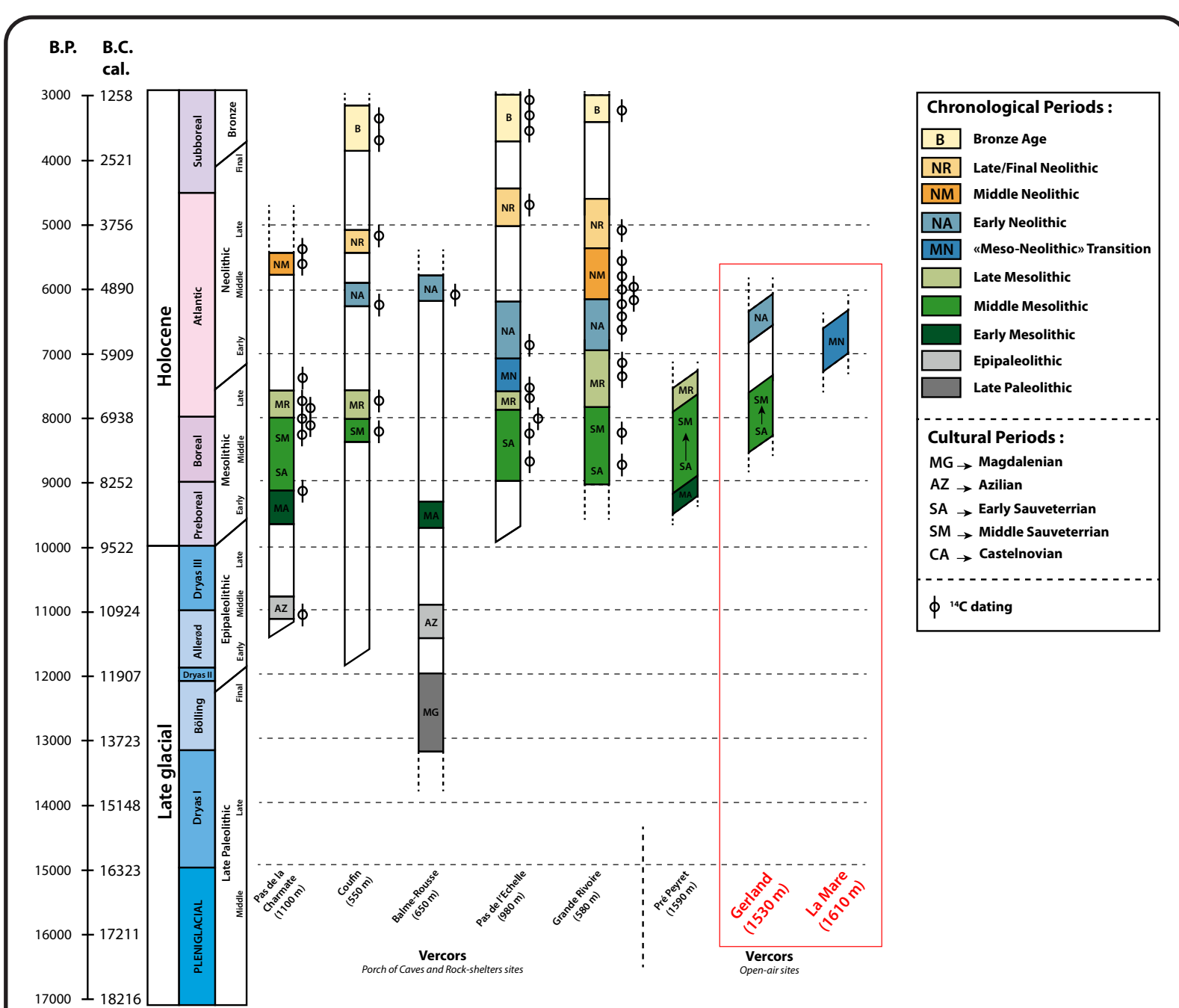


Figure 7 – Chrono-cultural sequence of main archeological sites in Vercors

Further research and excavations in the plateau of Vercors are necessary to improve our knowledge of prehistoric occupations in altitude. However, in these open-air contexts, a very specific culture cannot be identified until a very well stratified rock shelter site is completely studied. It is only then that further investigations could be pursued as well as an extensive study on the characterization and function of high altitude settlements.

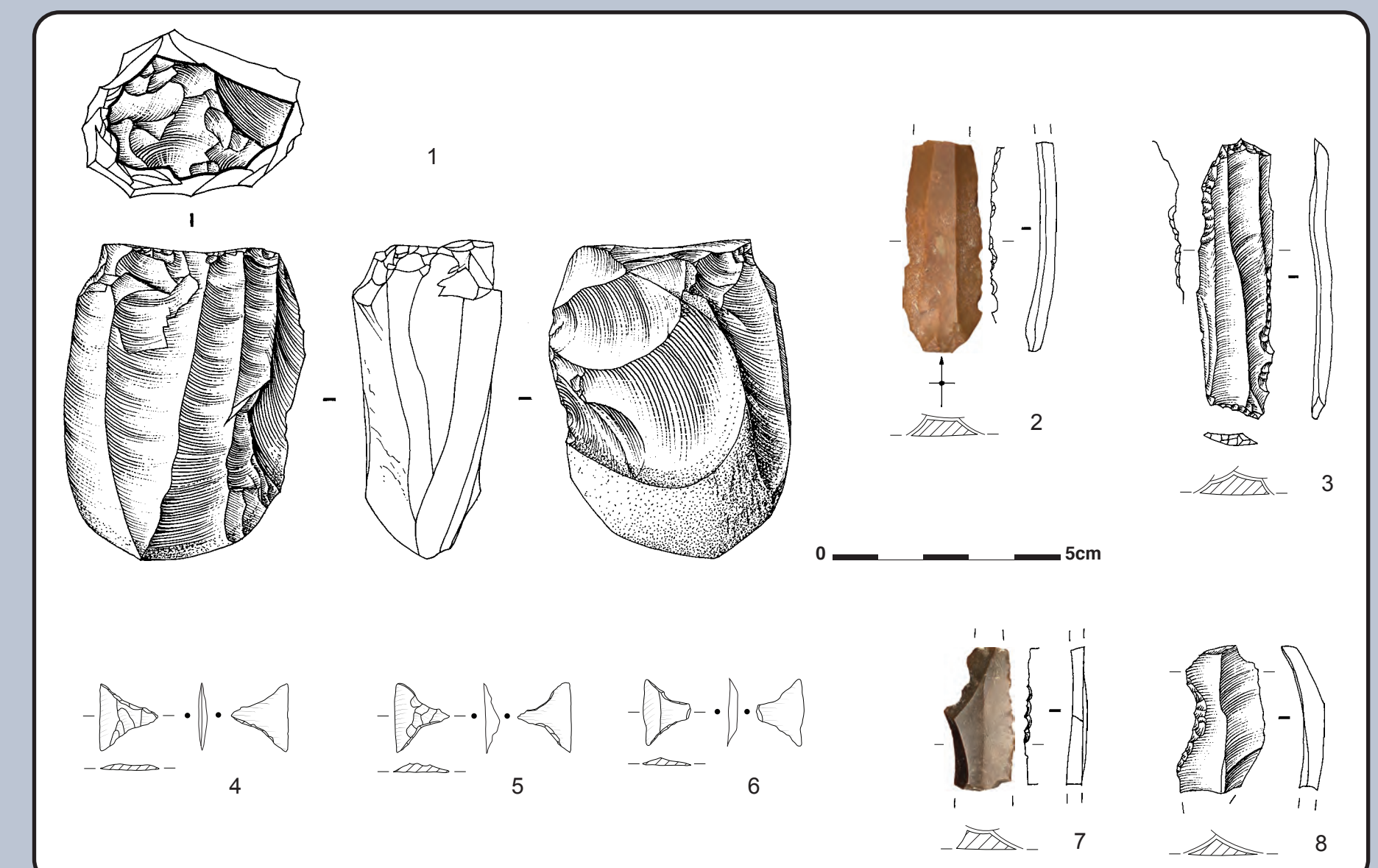


Figure 6 – Lithic materials from La Mare. 1. Blade core. 2-3. Blades with irregular direct and inverse side removals. 4-6. Geometrical arrowheads (4. Alterne bitruncations and direct low angles retouches, 5. Inverse bitruncation and direct low angles retouches, 6. Direct bitruncation). 7-8. Montbani's blades. (Drawings 1-3, 7-8 : R. Picavet).

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