Supplementary information - Experimental programme

To ensure the reliability of the traceological results, an experimental programme was carried out using tools having similar dimensions to the archaeological ones. The morphology of the supports and their angles were reproduced approximately. All the supports were made on Serreta flint type, since this is the most abundant variety in the selected analytical frameworks. Throughout the experimental programme, the work was carried out with animal tissue and wood. With regard to animal tissue, a *Capreolus capreolus* was processed. The widest possible range of actions was carried through. Some of these actions were based on the presence of traces of butchering activities in the faunal assemblage, like skinning, dismemberment, disarticulation, etc. (Pérez 2019; Pérez *et al.* 2020). As for the wood, both dry and green *Pinus nigra* and *Pinus halepensis*, were utilised. *P. nigra* is the most representative taxon in the anthracological record within the El Salt sequence (Vidal-Matutano 2016), hence its importance in the experimental programme. However, *P. halepensis* was also used to assess possible modifications depending on the tree species. The actions carried out were mainly cutting, scraping and whittling.

The times of use differed according to the availability of the utilised materials. In the case of wood, given its abundance, it was possible to develop two types of experiments: on the one hand, different actions for a limited time and, on the other, different actions until the tools were almost exhausted. In the first case, 10 tools were used, each of them for 20 minutes, in order to control the development of the traces generated by different actions during the same time of use. The remaining tools were used for a longer period of time, in order to analyse the formation of use-wear as the duration of the work increased. As for the animal tissue, due to the limited availability of it, the times of use differed depending on the carried- out activity, but it generally ranged around 50 minutes.

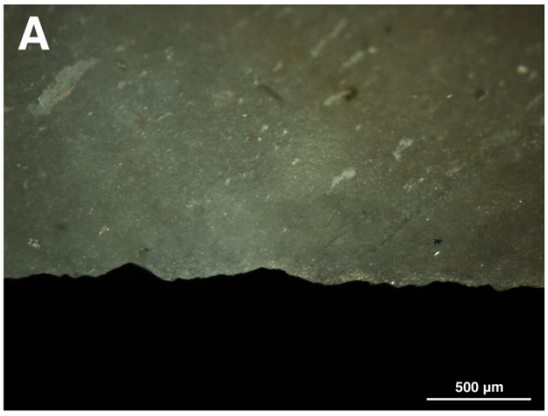
Throughout the experimentation, the following variables were taken into account: the type of activity, the edge angle, the performed movement, the angle of contact during the work, the material on which the work was accomplished, the time of use and the effectiveness of the tool. It is worth mentioning that the working angle is approximate, as we have not worked in a static way, but in a naturalistic way, always taking into account the type of activity being carried out. Therefore, we cannot relate it with a numerical value. According to this, 3 types of working angles have been established: high (the cutting edge arranged perpendicular to the material being worked), low (the cutting edge arranged almost parallel to the material being worked) and medium, between these two values. The working angle and the type of movement (longitudinal or transverse) determine the distribution and orientation of the use-wears.

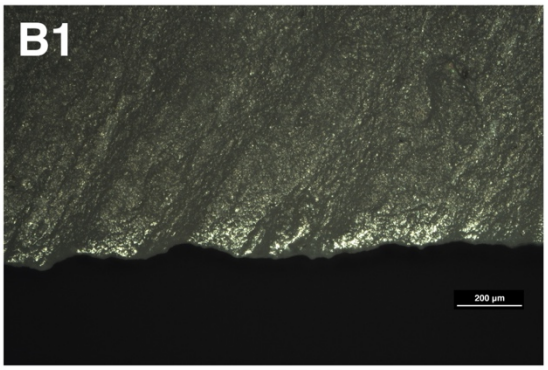
Analysing what kind of tools can be used for a specific task (according to size, angle and morphology) is important. In this case, most of the tools have morphopotential features allowing them to perform the activities efficiently.

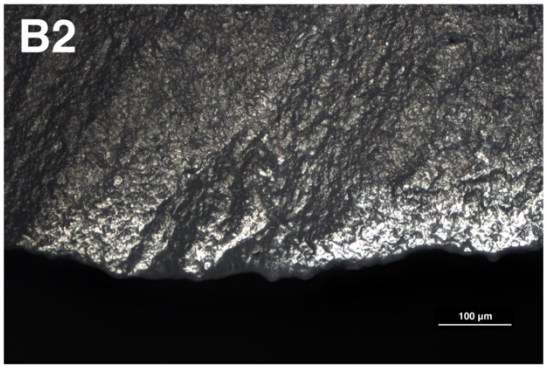
The experimental tools were analysed before and after using them, establishing control points on the tools to observe *a posteriori* the deformations that were produced. Before use, moulds of the edge of tools were also made, with resin (Light Body, Schmidt) in order to be able to analyse the original edge if necessary.

Tool ID	Flint type	Edge angle	Action	Objetive	Movement	Contact angle	Contact material	Species	Working time
1	Serreta	40º	Cutting	Cutting	Longitudinal	High	Green wood	*Pinus halepensis*	15 min
2	Serreta	45º	Whittling	Debarking	Transversal	Low	Green wood	*Pinus halepensis*	2 hours, 10 min
3	Serreta	40º	Cutting	Cutting	Longitudinal	High	Green wood	*Pinus halepensis*	1 hour, 15 min
4	Serreta	70º	Scraping	Sharpening	Transversal	High	Green wood	*Pinus halepensis*	3 hours
5	Serreta	50º	Cutting	Cutting	Longitudinal	High	Semidry wood	*Pinus halepensis*	1 hour, 50 min
6	Serreta	60º	Whittling	Debarking	Transversal	Low	Semidry wood	*Pinus halepensis*	2 hour, 3 minutos
7	Serreta	55º	Scraping	Sharpening	Transversal	High	Dry wood	*Pinus halepensis*	2 hours
19	Serreta	60º	Cutting	Cutting	Longitudinal	High	Green wood	*Pinus nigra*	20 min
17	Serreta	45º	Whittling	Debarking	Transversal	Low	Green wood	*Pinus nigra*	20 min
20	Serreta	50º	Scraping	Sharpening	Transversal	High	Green wood	*Pinus nigra*	20 min
16	Serreta	45º	Cutting	Cutting	Longitudinal	High	Green wood	*Pinus halepensis*	20 min
14	Serreta	40º	Whittling	Debarking	Transversal	Low	Green wood	*Pinus halepensis*	20 min
18	Serreta	40º	Scraping	Sharpening	Transversal	Medium	Green wood	*Pinus halepensis*	20 min
26	Serreta	50º	Cutting	Cutting	Longitudinal	High	Dry wood	*Pinus nigra*	20 min
27	Serreta	50º	Cutting	Cutting	Longitudinal	High	Dry wood	*Pinus halepensis*	20 min
28	Serreta	45º	Whittling/ scraping	Debarking/ Sharpening	Transversal	High and low	Dry wood	*Pinus nigra*	20 min
29	Serreta	50º	Whittling/ scraping	Debarking/ Sharpening	Transversal	High and low	Dry wood	*Pinus halepensis*	20 min

Table 1. Tools involved in the experimental programme on wood.







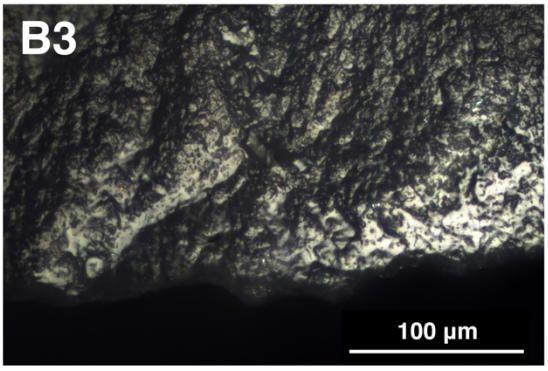


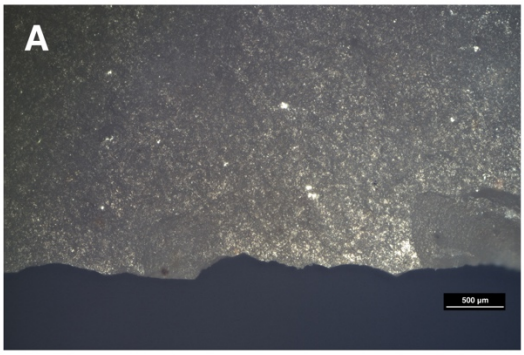
Fig. 1 Tool 4, scraping on *Pinus halepensis*. A) Use-wear traces on dorsal surface at 50x, B) Use-wear traces on ventral surface at 100x, 200x and 500x.

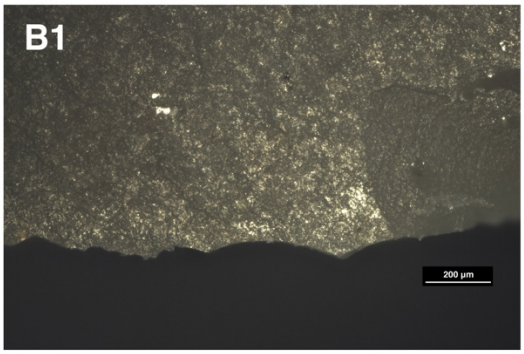
Fig. 2 Tool 26, cutting on *Pinus nigra*. A-B) Use-wear traces on ventral surface at 50x, 100x, 200x and 500x.

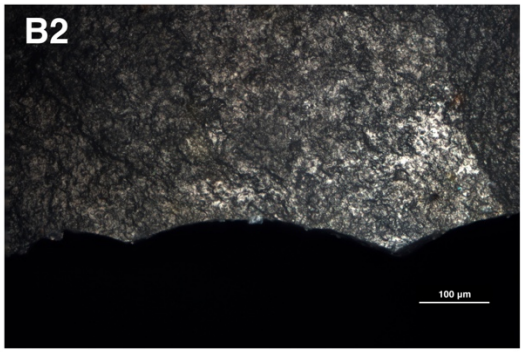
Fig. 3 Tool 29, whittling/scraping on *Pinus halepensis*. A) Use-wear traces on dorsal surface at 50x, B) Use-wear traces on ventral surface at 100x, 200x and 500x.

Tool ID	Flint type	Edge angle	Action	Objetive	Movement	Contact angle	Contact material	Species	Working time
8	Serreta	40º	Cutting	Defleshing	Longitudinal	Low	Flesh, tendons, bone	*Capreolus capreolus*	60 min
9	Serreta	35º	Cutting	Defleshing	Longitudinal	High	Flesh, tendons, bone	*Capreolus capreolus*	22 min
10	Serreta	20º	Cutting	Defleshing, Disarticulation	Longitudinal	High/low	Flesh, tendons, bone	*Capreolus capreolus*	40 min
11	Serreta	20º	Scraping	Defleshing	Transversal	High	Flesh,bone	*Capreolus capreolus*	40 min
12	Serreta	15º	Sawing	Grooving	Longitudinal	High	Bone	*Capreolus capreolus*	7 min
13	Serreta	20º	Cutting	Drilling	Longitudinal	High	Fresh hide	*Capreolus capreolus*	40 min
15	Serreta	25º	Cutting	Disarticulation	Longitudinal	High/low	Flesh, tendons, bone	*Capreolus capreolus*	15 min
21	Serreta	70º	Cutting	Disarticulation	Longitudinal	High	Flesh, tendons, bone	*Capreolus capreolus*	1 hour, 5 min
22	Serreta	50º	Cutting	Disarticulation	Longitudinal	High	Flesh, tendons, bone	*Capreolus capreolus*	1 hour, 15 min
23	Serreta	55º	Cutting	Skinning	Longitudinal	High	Skin, meat	*Capreolus capreolus*	20 min
23	Serreta	55º	Cutting	Skinning	Longitudinal	High	Skin, meat	*Capreolus capreolus*	1 hour, 40 min
24	Serreta	80º	Cutting	Skinning	Longitudinal	High/low	Skin, meat	*Capreolus capreolus*	1 hour, 40 min
25	Serreta	70º	Scraping	Softening	Transversal	Low	Dry skin	*Capreolus capreolus*	3 hours

Table 2. Tools involved in the experimental programme on animal tissue.







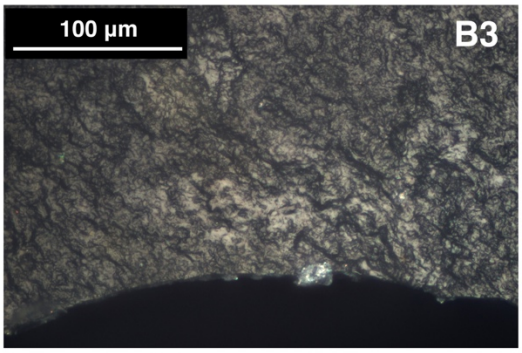
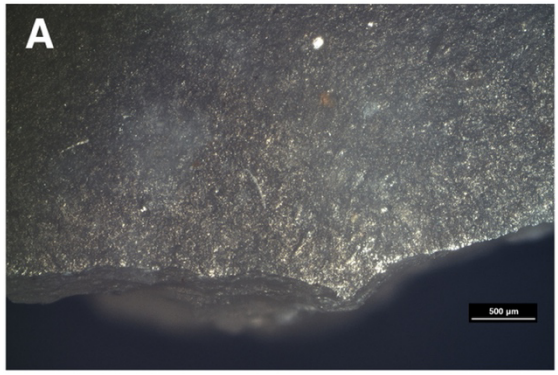
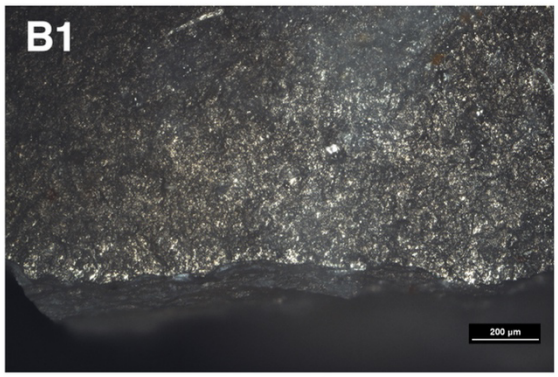
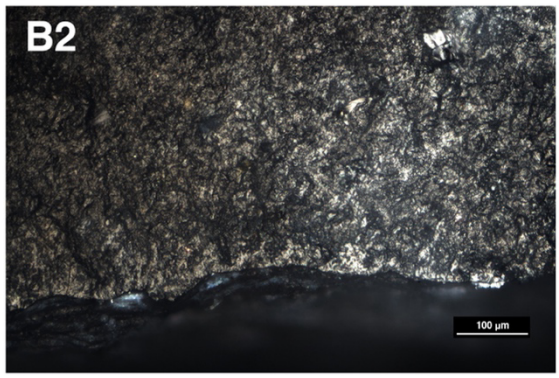


Fig. 4 Tool 22, disarticulating a *Capreolus capreolus*. A-B) Use-wear traces on ventral surface at 50x, 100x, 200x and 500x.







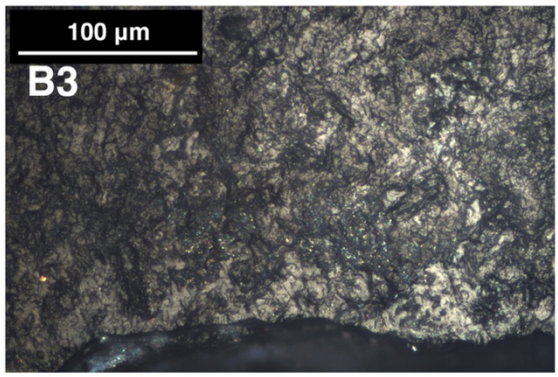


Fig. 5 Tool 24, skinning a *Capreolus capreolus*. A-B) Use-wear traces on dorsal surface at 50x, 100x, 200x and 500x.

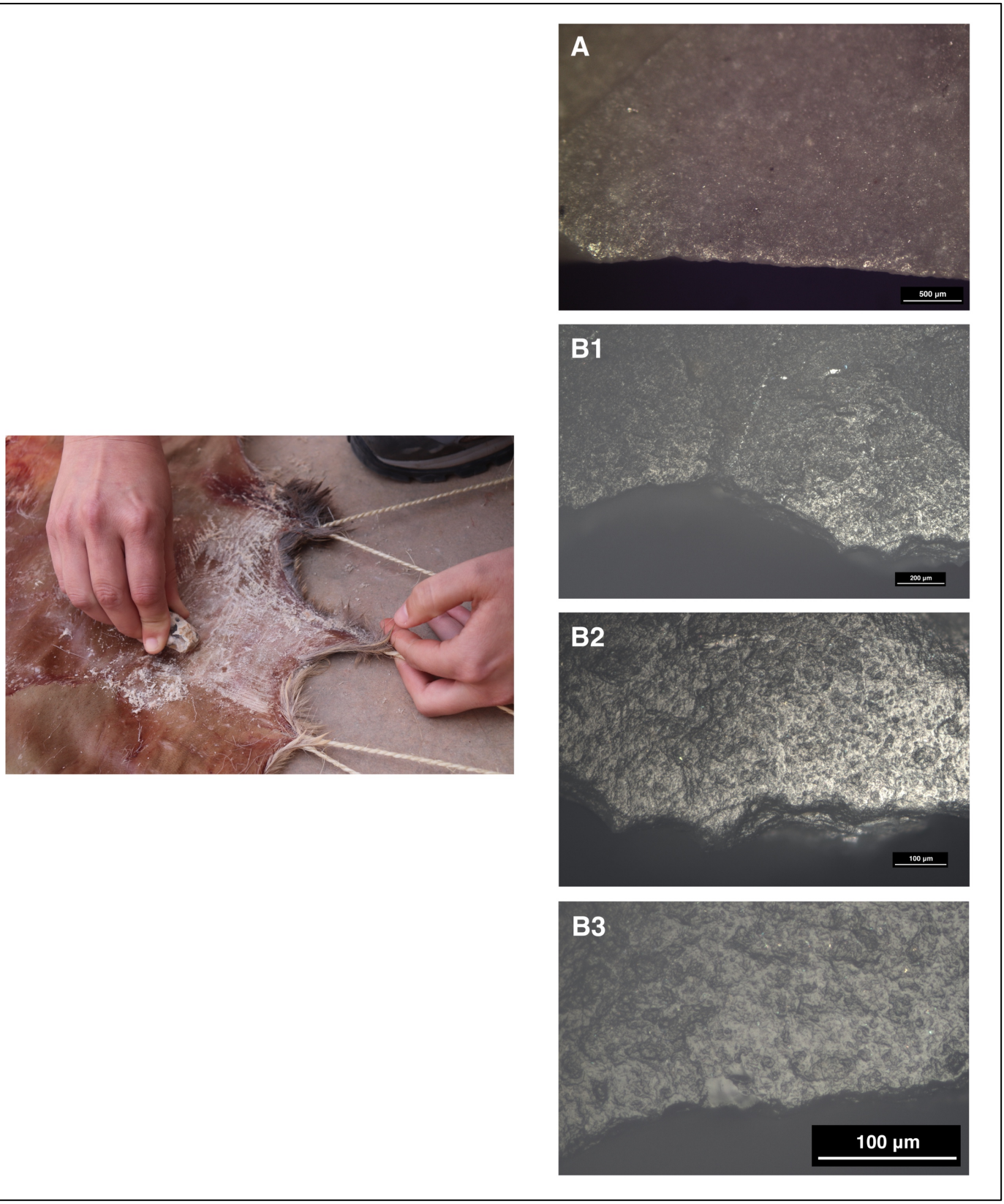


Fig. 6 Tool 25, scraping dry skin of a *Capreolus capreolus*. A) Use-wear traces on dorsal surface at 50x, B) Use-wear traces on ventral surface 100x, 200x and 500x.