## Excavations at the high altitude mesolithic site of Pian de La Lóra (Val Civetta – Venetian Dolomites)

## New data on the last hunter-gatherers of northern Italy

by Carlo Franco\*

In July 2007, the Department of Humanities of Ca' Foscari University (Venice) in partnership with the "Gruppo Archeologico ARCA" of Agordo and the "Associazione Amici del Museo di Belluno", carried out the first season of excavations at the site of Pian de La Lóra, an open-air mesolithic station located at 1930 m a.s.l. in the western fringe of the Civetta Group (Venetian Dolomites). Field research, coordinated by the author, focused on a marginal moraine in southern Val Civetta, a spot surrounded by boulders, marshes and a seasonal basin (the eponymous "Lóra") where previous surveys had collected a few flint artefacts preliminary attributed to a Late Mesolithic tradition. This preliminary sondage progressively entailed the opening of a 12 square meters trench at coordinates 46°22'15" N - 12°01'02" E (WGS84). Since the beginning, research process involved systematic wet sieving of the excavated soil, taking advantage of an artificial stream flowing next to the site from a rainwater container at an higher quote. After removing the topsoil, the archaeological deposit showed a maximum depth of 15-30 cm, depending on the excavated sector. Such variability was directly linked to the natural profile of the sterile base layer, made by an incoherent bed of limestone cryoclasts. The whole excavation area then showed a basic pedostratigraphic profile: a very dark brown and clayish upper level (US1) and a light brown, thinner and slightly coarser lower lever (US2). Almost all the finds (limited to charcoals and lithics) emerged from the second one, which was referred to a single short-term occupation. Creating the conditions for later refitting and spatial analysis, flint artefacts recognized at sight in the trench were recorded according to their precise grid coordinates, while all the finds recovered through wet sieving operations where recorded following the square of provenance.



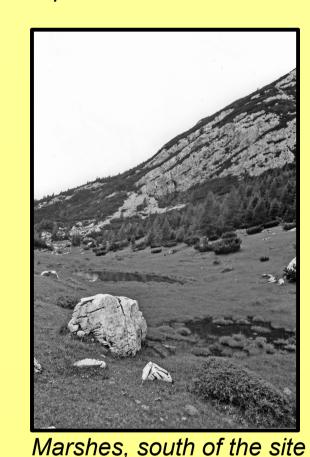
Opening of the excavation: preliminary check of the deposit below the topsoil



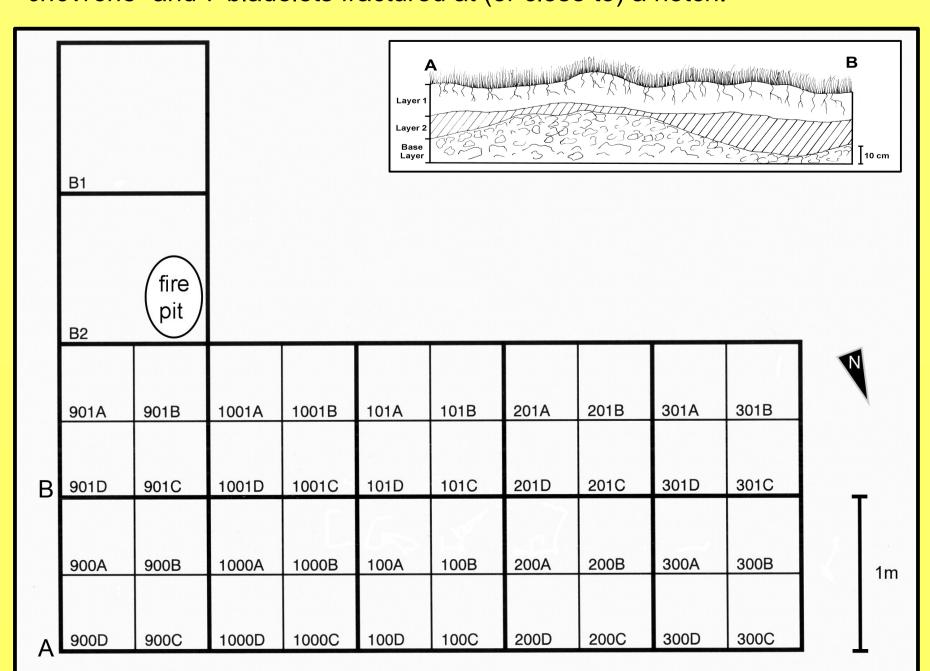
The manual, tireless wet sieving of the archeological deposit



The sterile layer at the bottom of the excavation trench



The accurate methodology applied in the excavations led to the discovery of a significant flint assemblage, whose richness and variety went far beyond expectations. Preliminary results from a deeper typological and typometrical analysis still to be published show the presence of more than 1200 unretouched lithic artefacts, most of which burnt or fragmented. As regards the complete specimens, they are mainly composed by microlithic and ipermicrolithic very flat modules, along with a few blades/bladelets whose features (regular, thin, sub-parallel edges) are clearly attributable to a *Montbani* style of production. No pre-cores were found in the collection, while it is possible to count at least 5 small polyhedric or prismatic cores with one or two prepared platforms, generally exhausted. Retouched artefacts are equally shared between common tools and armatures. Significantly, the first group consists of 10 end-scrapers on bladelet or blade-like flake, a single burin on thick blade with simple biseau, one scraper on flake with a bilateral retouch, a truncation on bladelet and, most of all, 16 notched or retouched blades/bladelets. Along with them, the toolkit is completed by at least 10 asimmetrical trapezes on blade/bladelet, 7 hypermicrolithic scalene triangles, one backed segment, one double-backed point and a few other microliths with a steep, abrupt retouch. Furthermore, the collection includes a couple of flint percussors and more than a hundred discards of the preparation of the geometric projectile points (trapezes and triangles), subdivided in 89 microburins, 6 "chevrons" and 7 bladelets fractured at (or close to) a notch.



Plan of the excavation trench and section through deposits in squares 900A-900D



Site location in Val Civetta, looking southward from Col Rean.



Pan of the excavation area, looking northward.



Site location on the moraine, as seen from the scree of Cantoni di Pelsa.

Supporting the chronological and cultural position of the superficial finds earlier collected in the same area, the lithic collection recovered during excavations homogeneously belongs to the Late Mesolithic tradition that spread in nothern Italy between 7900 and 6600 uncal BP, placing site occupation in the Early Atlantic climatic phase. Recently, such preliminary approximation has been overcome by radiocarbon dating of a small fire pit (Structure 1) unexpectedly brought to light in the last days of the campaign and whose content, fully packed with charcoals of different sizes, was sampled apart for further paleoenvironmental studies. The obtained date is 7290±50 uncal BP (GrN-31265), while first results from the archaeobotanical analysis suggest a clear proximity to an open spruce/larch woodland.



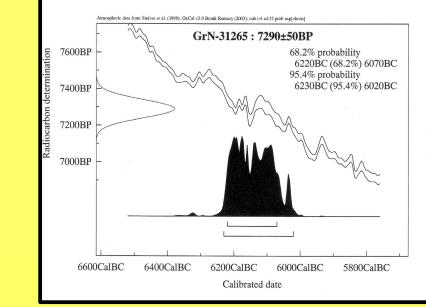
Pian de La Lóra in the context of the Late Mesolithic camp-sites in the Venetian Dolomites and location of the research area in north-eastern Italy

Despite the total lack of faunal remains and bone/antler artefacts due to pedogenetical factors, overall features of the flint assemblage reveal a strong specialization of the camp, where the local production of geometric arrowheads on blade/bladelet with the *microburin technique* seems to have been a regular activity in support of a hunting expedition. Observing this fact in the light of site location at the beginning of the Altantic, namely in a high-altitude district rich in water sources and natural shelters, next to the ecotonal upper tree belt and crossed by strategical alpine routes (as nowadays), it's then clear that mesolithic hunter-gatheres settled in Pian de La Lóra during the good season, in phase with the annual upward migration of wild ungulates. This functional interpretation is shared with the close Mondeval de Sora VF1 site and many other coeval finds lately discovered in the same district.

Although site specialization can be easily understood, it doesn't seem to be anyway as extreme as commonly seen in other mesolithic high-altitude open-air stations. As seen before, along with armatures and microburins, other tools like end-scrapers and retouched blades/bladelets are well represented in the lithic collection, fostering the idea that some maintenance tasks were carried out at the camp, like butchering or arrow crafting/repairing. In this case, the episode of occupation would result less ephemeral than usually thought but, following the research methods successfully applied at the Late Mesolithic alpine site of Laghetti del Crestoso (Bovegno, Brescia), trace wear analysis of the whole toolkit will soon aswer this question.



The fire pit in square B2

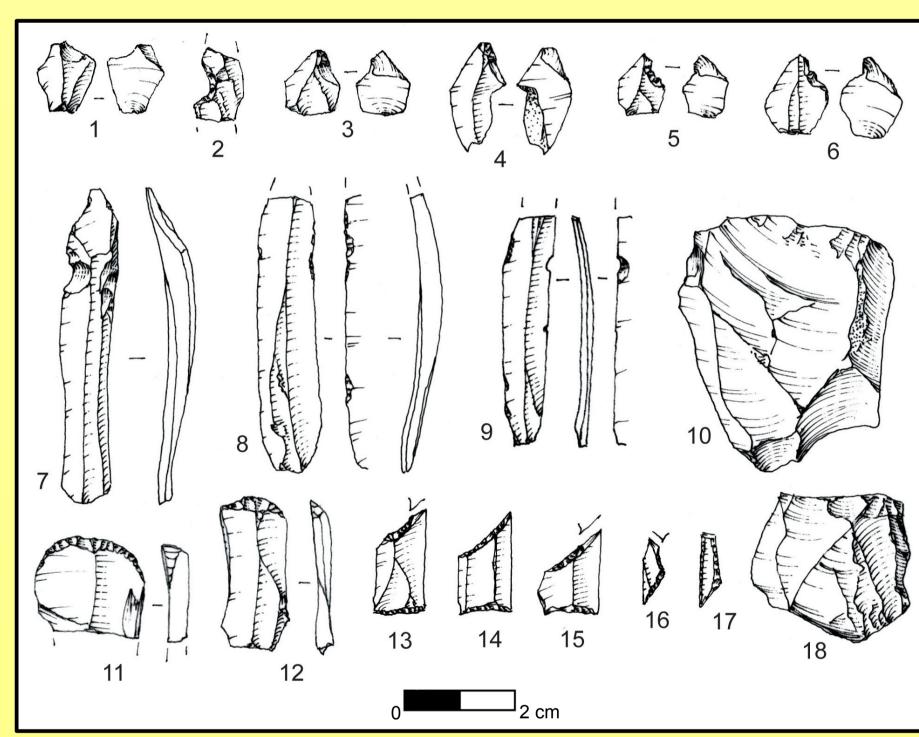


Radiocarbon date of the fire pit

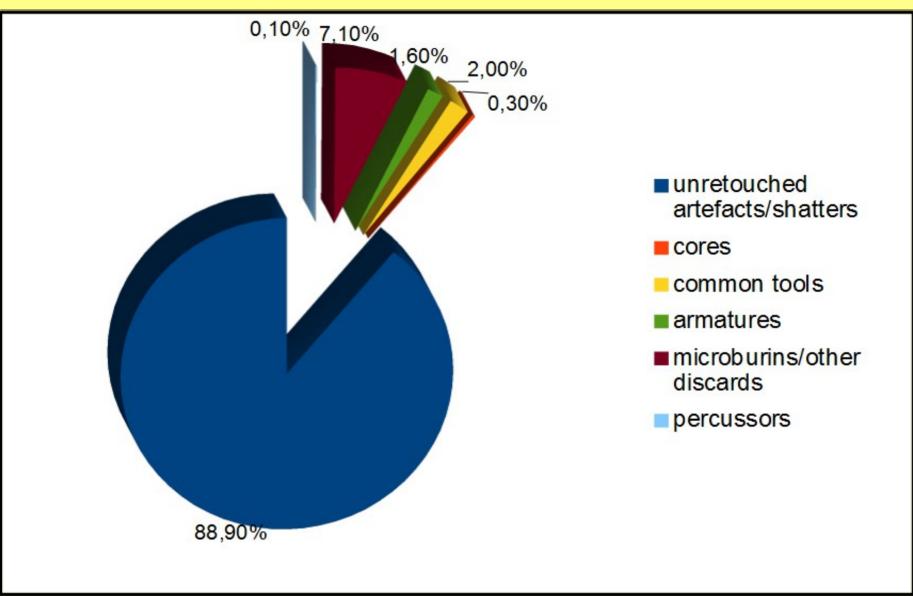
So, where did those hunters come from? It's hard to say, but good hints are coming from the preliminary analysis of raw material used for lithic production. From this point of view, there are no traces of hyaline quartz in the whole assemblage, while good quality flint from eastern Venetian Prealps and the Piave alluvial plain is the most represented. This means that site inhabitants necessary crossed those regions along the year or they had an exchange relationship with groups who had direct access to southern flint outcrops. Both the schemes are supported by dozens of Late Mesolithic sites already known from the Venetian prealpine/foothills belt to the planitial "spring line", including the Montello area. In any case, raw material had to be collected as nodules or pebbles, probably from secondary deposits, and carried away in such a form up to Pian de La lora, as confirmed by the presence of decortication waste among chipped artefacts.

Human presence in Val Civetta during Early Atlantic has therefore to be analysed as a part of a much broader logistic system, reasonably extended from the Piave alluvial plain to the Dolomitic area. Within this system, coincevable as a wide tribal territory, all the Late Mesolithic finds suggest the existence of efficient social networks and non-random routes across seasonal supply areas. Besides, archeological results from Pian de La Lóra and the increasing discoveries of trapezoidal armatures in the Venetian Dolomites call into question the common idea of an inescapable disertion of the alpine regions at this cultural stage, due to increased mountain forestation and consequent evolution of hunting strategies. If at all, it's now coming to light that Late Mesolithic bands exploited new highaltitude districts compared to Boreal hunters.

Nevertheless, many are the unsolved questions about Late Mesolithic of north-eastern Italy, where the archaeological visibility of hunter-gather societies seems to fade long before a stable settlement of Neolithic communities in the landscape. In such a context, researches in progress foster new reflections on this key phase, allowing to believe that other mesolithic camp-sites are just waiting to be discovered in Val Civetta.



Some representative samples of the lithic typology within the assemblage: Microburins (1, 3-6); Isolated notch next to a fracture (2), Retouched blades (7-9); End-scrapers (10-11); Trapezes (12-15); Triangles (16-17); Cores (10,18)



Main subdivision of the lithic complex



The "Lora" depression below the site (red arrow), still flooded at end of the spring.

\* PhD in Archaeology at Ca' Foscari University of Venice - Independent researcher Email: utinum@gmail.com