
Early Mesolithic pressure blades: a functional analysis of a porphyry blade assemblage from Sujala, northern Finland

Kjel Knutsson^{*1}, Helena Knutsson^{*†2}, Tuija Rankama³, and Jarmo Kankaanpää³

¹Uppsala University – Box 256 75105 Uppsala, Sweden

²Stoneslab – Säves väg 40, 75263, Uppsala, Sweden

³University of Helsinki – Finland

Abstract

In 2002 a Mesolithic settlement was discovered in northernmost Finnish Lapland by the Helsinki based archaeologists Tuija Rankama and Jarmo Kankaanpää. In 2004 they invited a group of Scandinavian researchers to survey this area and conduct preliminary investigations. The site, characterized by a pressure blade industry, was excavated in 2004-2005 and was later dated to ca 9200 BP (8300-8200 cal BC). The material has its closest parallels to lithic industries in western Russia and relates to the contemporaneous Butovo/Veretye tradition. The site that belongs to the pioneer settlement of eastern Fennoscandia, marked the beginning of a joint Scandinavian research on the post Weichselian settlement of the Scandinavian peninsula. The research focused on the origin and spread of the pressure blade industry, and soon came to identify the change between the Early and Middle Mesolithic on the Scandinavian peninsula ca 8300 cal BC with a characteristic pressure blade industry, as a result of migration from Eastern Europe. This process was followed by, among other things, a discussion of the character of change focussing now on the Chaîne opératoire of this blade industry and its relation to the actual use of the blades. Blades and blade segments are characteristic and one line of inquiry has shown that one of the main ideas of this technology is to use blade segments as insets in slotted bone points. But a variable use of these blades and blades segments is expected, something that has called for a functional analysis. In northern Finland, Norway the Kola peninsula as well as in parts of Sweden, the blade industry belonging to this tradition is based on fine-grained igneous rock like porphyry and tuffites. Not much is known about the applicability of use-wear analysis on these types of easily weathered raw materials. In this presentation we account for a preliminary use-wear analysis of a sample of blade fragments from the Sujala site based on use experiments with porphyry blades.

Keywords: Use, wear, porphyry, pressure blades, Early Mesolithic, Finland

*Speaker

†Corresponding author: stonesslab@gmail.com