

# TURONIAN FLINTS DEPOSITS ON THE RIGHT BANK OF THE VISTULA RIVER IN THE LIGHT OF A NEW LATE PALAEOOLITHIC DISCOVERIES IN THE LUBLIN REGION (EASTERN POLAND)

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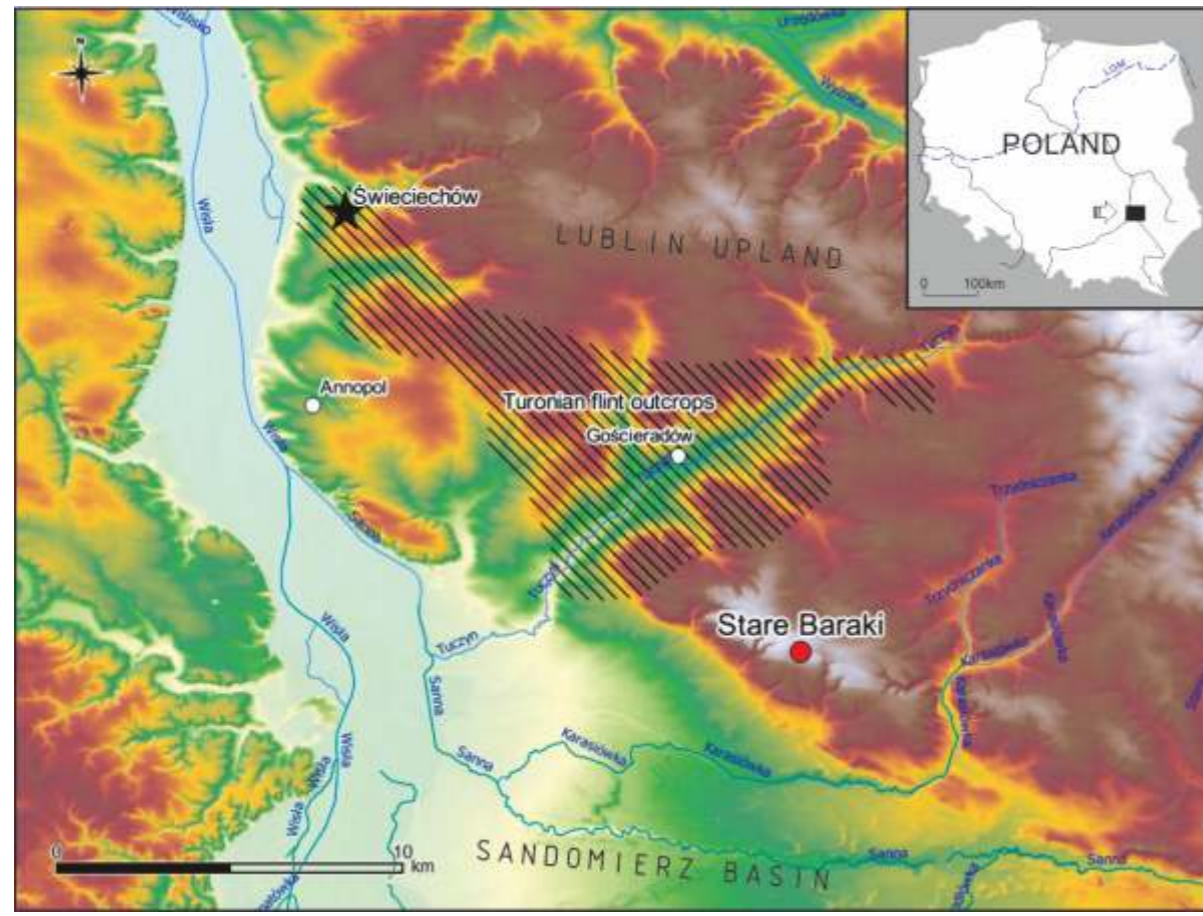
9th International Conference  
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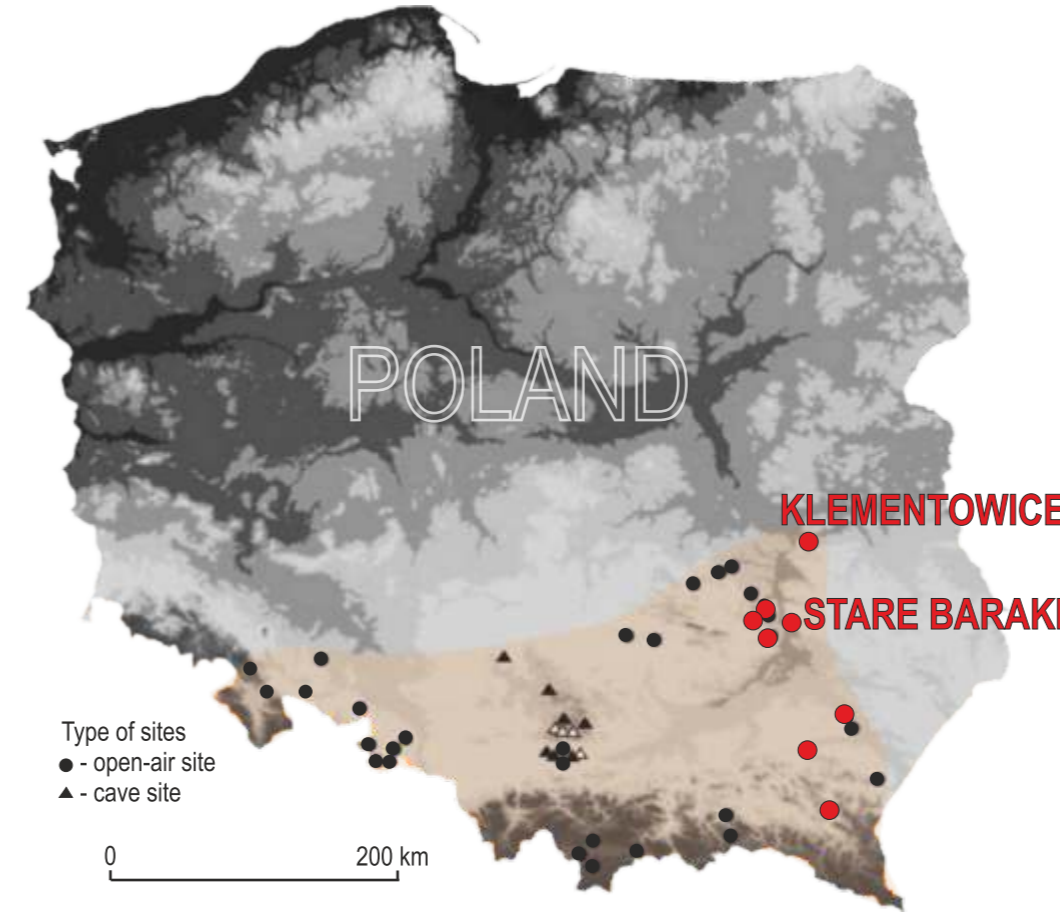
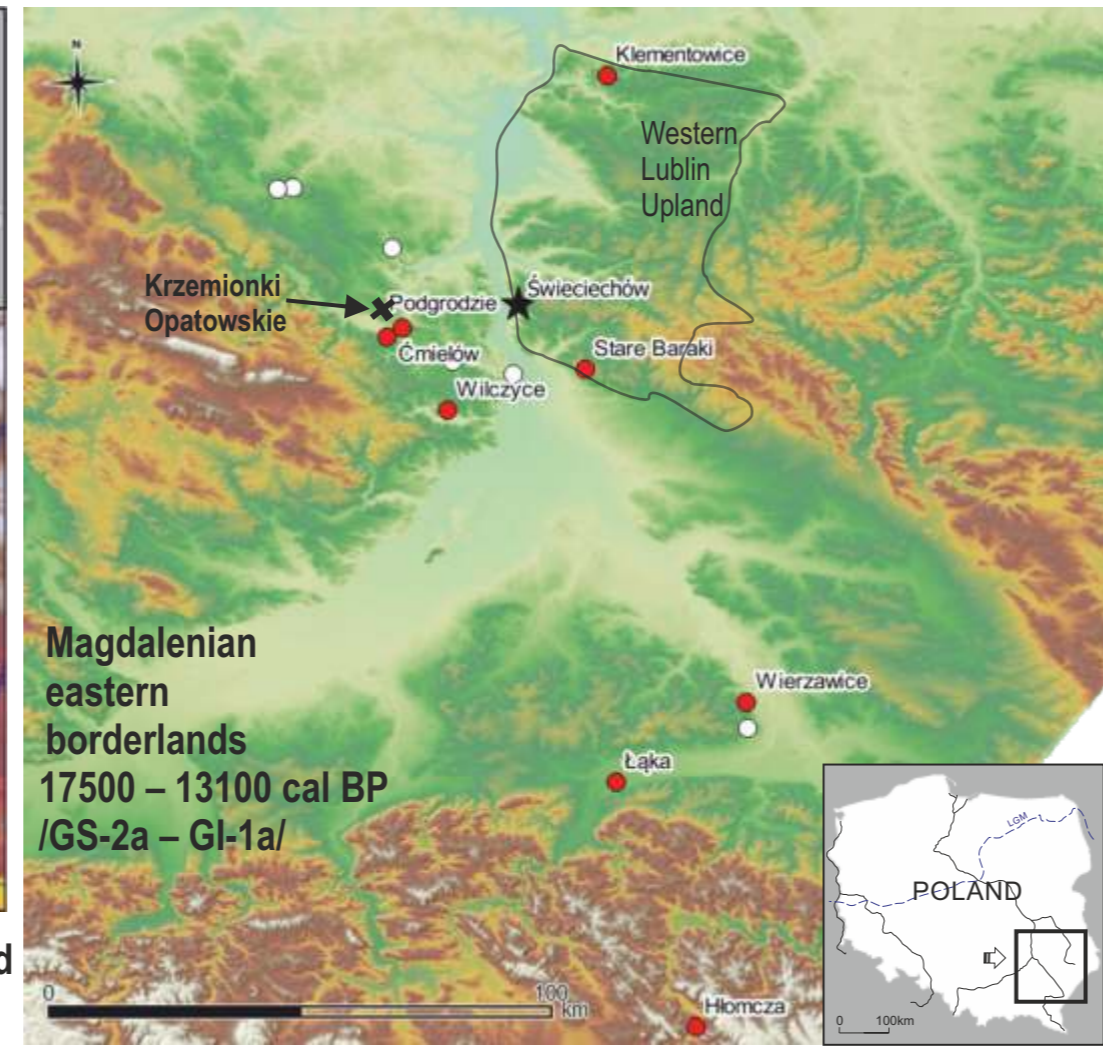
Archaeological Museum and Reserve  
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NATIONAL SCIENCE CENTRE  
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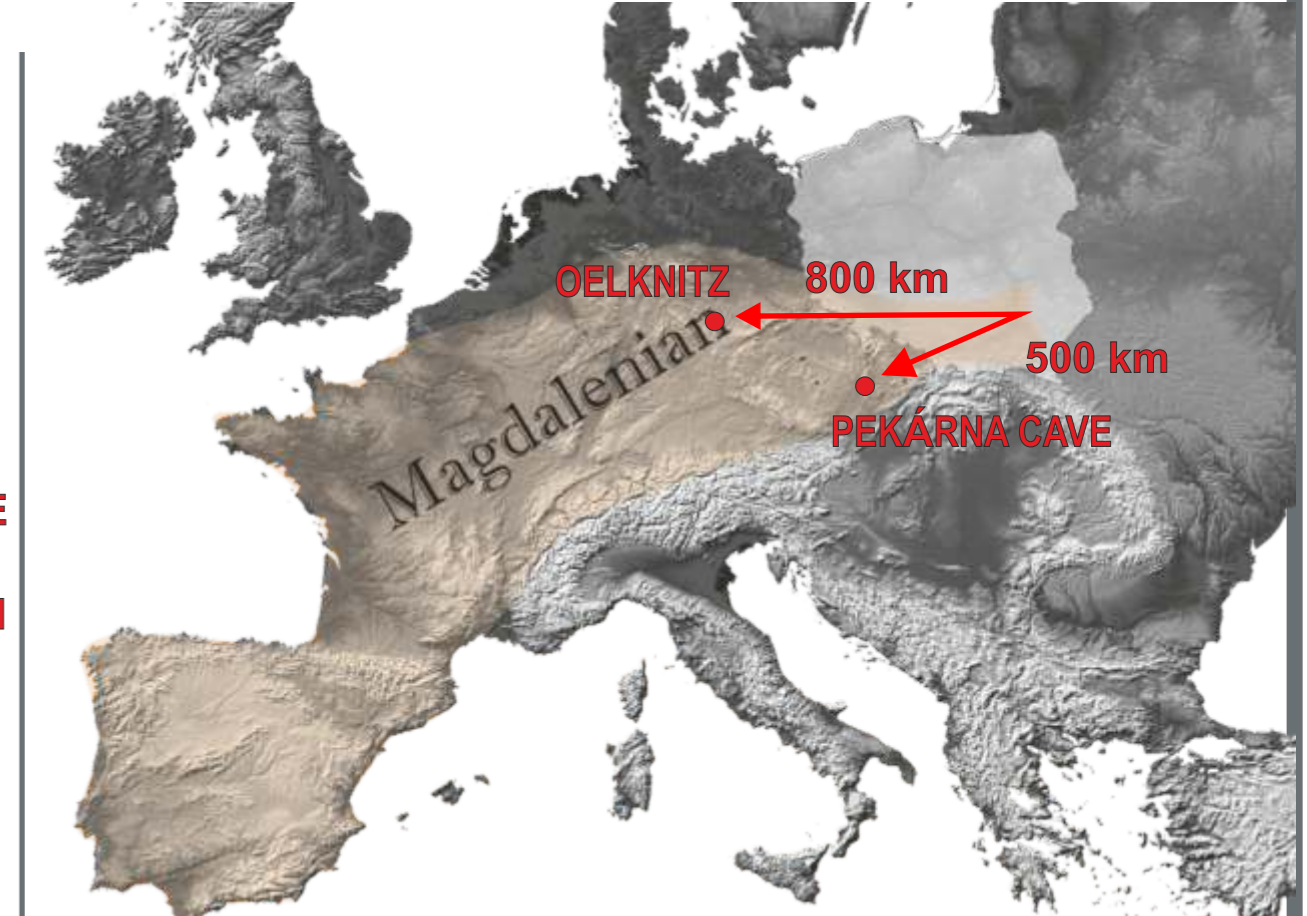
The subject of the presentation is connected with the realization of a research project *Late Palaeolithic settlement in the western part of the Lublin Upland* financed by the National Science Centre (2014/15/N/HS3/01766).



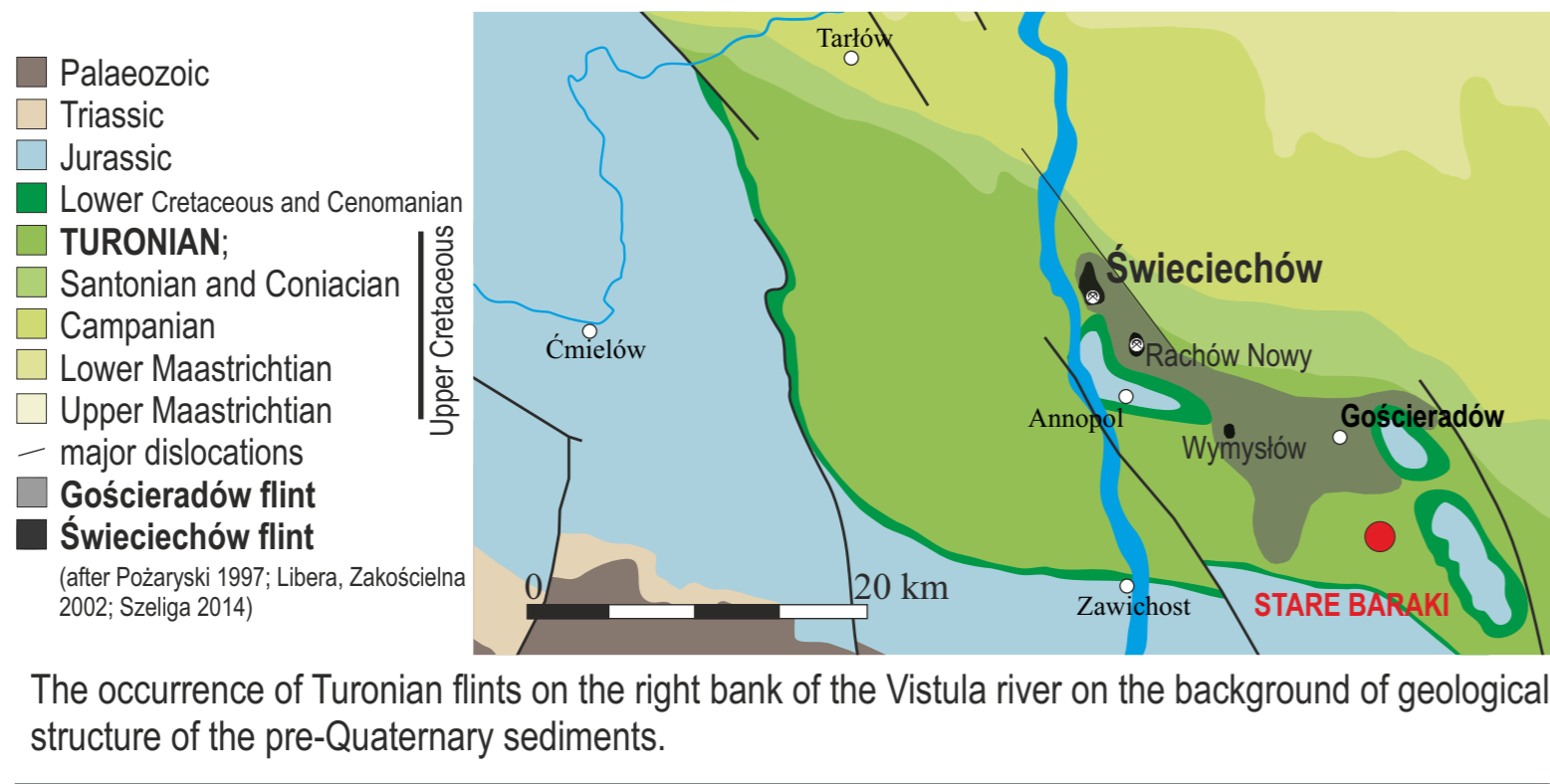
Location of the Magdalenian site in Stare Baraki against the background of the occurrence of Turonian flints.



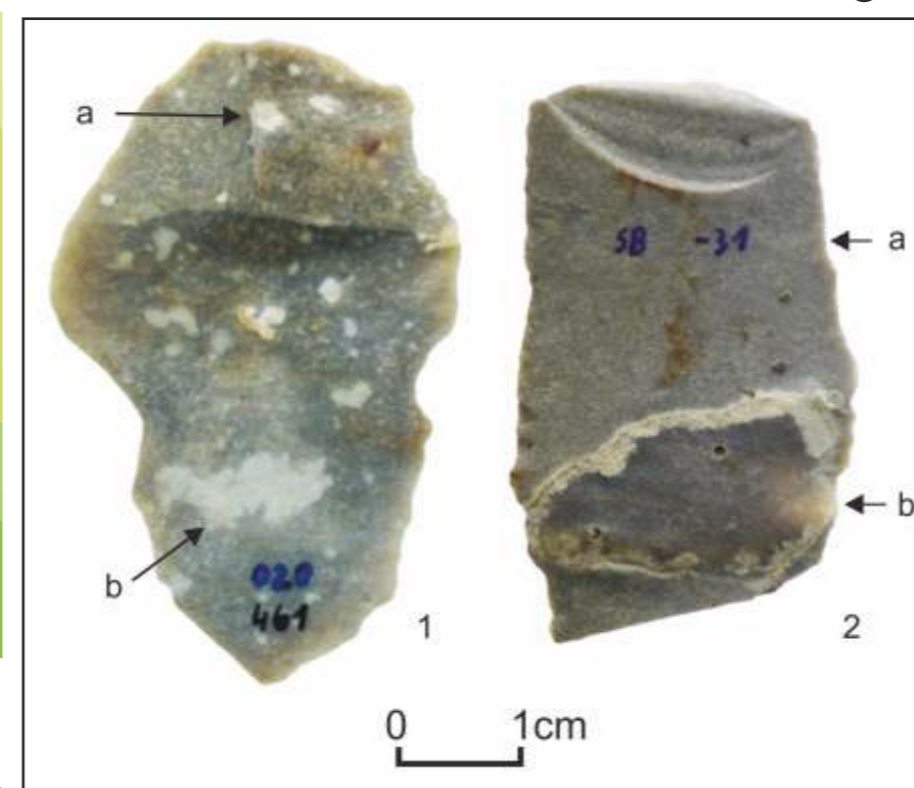
Distribution of Magdalenian sites in the territory of Poland.  
● - Magdalenian sites with Świeciechów flint  
○ - other Magdalenian sites without Świeciechów flint



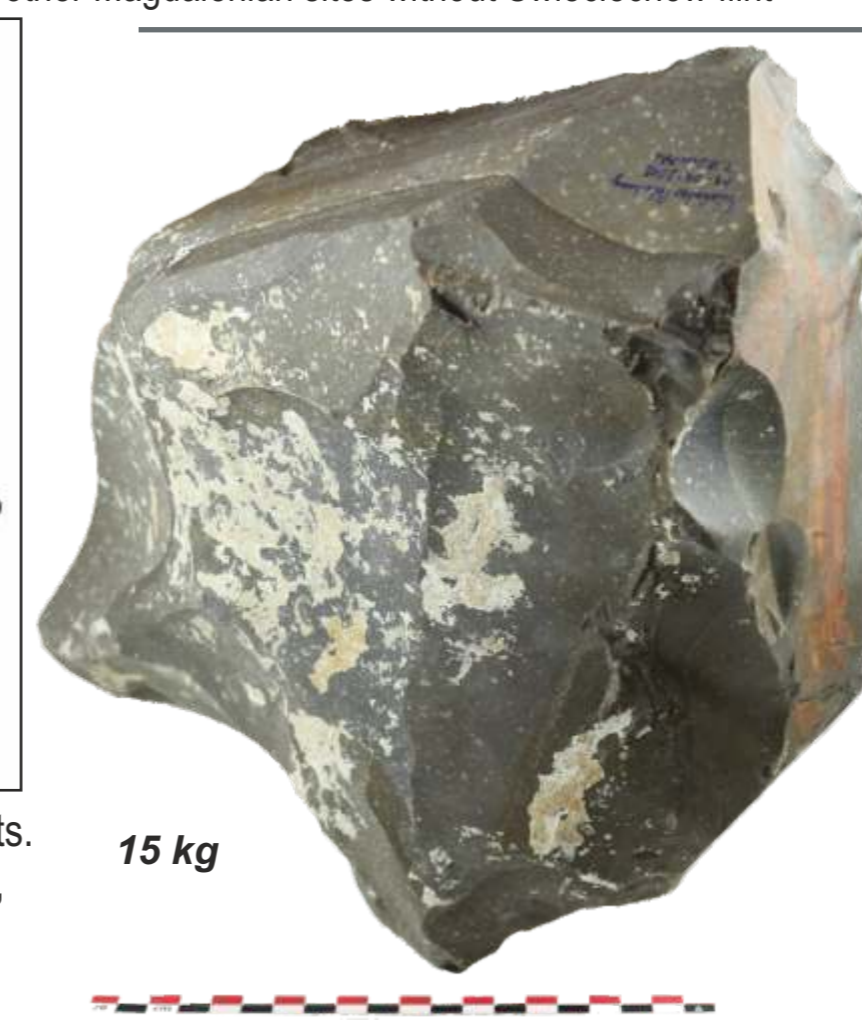
..and Europe. 17500 - 13100 cal BP /GS-2a - GI-1a/



The occurrence of Turonian flints on the right bank of the Vistula river on the background of geological structure of the pre-Quaternary sediments.



Examples of the silica mass of some analysed artefacts.  
1a-b: the Świeciechów and Gościeradów flint variants,  
2a-b: a grey type (Świeciechów type) combined with blackish flint (Gościeradów type).



SPOTTED ŚWIECIECHÓW SILICITE  
GREY WHITE-SPOTTED FLINT  
ŚWIECIECHÓW FLINT  
KRZEMIEŃ ŚWIECIECHOWSKI  
KRZEMIEŃ SZARY BIAŁO NAKRAPIANY

## INTRODUCTION

During the research project, which was carried out between 2015-2019, several interesting finds were discovered. The main aim of the project was to research the late Palaeolithic settlement in the western part of the Lublin Upland. The chronological frames of the project begins after the Last Glacial Maximum (16,000 calBP) to the beginning of the Holocene - Preboreal period (10,000 calBP).

## TURONIAN FLINTS DEPOSITS ON THE RIGHT BANK OF THE VISTULA RIVER

In the south-west part of the Lublin Upland (E Poland), in the area of the Annapol and Gościeradów Anticline, various types of flint of the Turonian age are found in chalk deposits. They had been discovered, described and characterized by J. Samsonowicz (1924-1925) and S. Krukowski (1920). These raw materials are technically good-quality rocks; the most well-known variety of which is Świeciechów flint (Balcer 1976), also named spotted Świeciechów silicite (Přichystal 2013). Grey Turonian rocks occurring in this region are very diverse macroscopically.

## LATE MAGDALENIAN ON EASTERN BORDER

In the territory of eastern and south-eastern Poland, only several well-dated magdalenian sites are known so far. The radiometric dates confirm the settlement from phase GS-2a to GI-1a (17500 calBP - 13100 calBP) (Połtowicz-Bobak 2013). The structure of raw material connects these inventories. The basic material or one of the most important for the manufacturing of tools were Turonian flints with Świeciechów flint as the most popular type.

## A NEW DISCOVERIES

During surface surveys conducted in the spring of 2018 it was possible to positively verify Stare Baraki site. The site is located in the south-western part of the Lublin Upland (eastern Poland). This is a second Magdalenian site in the Lublin region besides of Klementowice site (Wiśniewski 2015).

## STARE BARAKI

In the raw material structure of the Stare Baraki inventory, various shades of grey and black Turonian age flints are dominate. There is no clearly dominant variety here. Both the typical variety of Świeciechów flint and other shades of gray varieties represent a similar quantitative share. The outcrops of Turonian age flints (with most known Świeciechów and Gościeradów variety) and other varieties are located within a 3-10 km radius of the site in Stare Baraki.

## KLEMENTOWICE

Magdalenian site in Klementowice is located in the north of the western part of the Lublin Upland (eastern Poland). To these time, it is one of the biggest known Magdalenian campsite from the Polish territory. In contrast to Stare Baraki nearly all artefacts from Klementowice are patinated. The patina is very diversified – from very weak, enabling the correct identification of the raw material, to very strong. Amongst the materials from Klementowice the most strongly represented is the characteristic Świeciechów variety.

## CONCLUSIONS

- The site **Stare Baraki** is the first Magdalenian settlement in eastern Poland which is located **directly in the vicinity** of outcrops of a very good quality Turonian flints.
- These findings may confirm earlier assumptions that the **Magdalenian settlement** in the eastern borderlands was uninterrupted and stable from **GS - 2a to GI - 1c / GI - 1a**.



GOŚCIERADÓW FLINT  
GREY SPOTTED FLINT  
KRZEMIEŃ GOŚCIERADOWSKI  
KRZEMIEŃ SZARY PLAMISTY

STARE BARAKI  
N 50°49'1" E 22°3'10.39"

EXAMPLES OF ARTEFACTS  
(TURONIAN FLINTS)

KLEMENTOWICE  
N 51°20'26,83" E 22°8'57,13"



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