### PROGRAMME P6-0064, 2009–2014: Archaeological Research

#### **Programme number:**

P6-0064

#### **Duration:**

2009-2014

#### Programame leader:

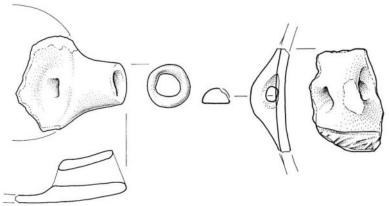
Anton Velušček

The proposed programme "ARCHAEOLOGICAL RESEARCH" is concentrated on the basic research aiming to collect high quality data about the development of humans and society in the remote past periods in the south-eastern Alpine region.

The multileveled programme comprises an ample spectrum of fundamental topics from introducing and verifying new research methods, creating databases and documentation systems for collecting new comprehensions about settlement patterns, economy, social processes and the way of life of the people who settled the south-eastern Alpine region from the Prehistory to the Early Middle Ages. The programme is composed of different topics as follows:

- 1. The archaeological portrait of the Slovenian landscapes between 5th and 2nd millennium BC
- 2. North-eastern Slovenia in the Late Bronze Age
- 3. South-eastern Alps in the 2nd and 1st centuries BC
- 4. The Romanisation processes on the territory of Slovenia
- 5. Roman inscriptions of Slovenia
- 6. Greek and Roman literary sources for the eastern Alpine area and the western Balkans
- 7. Roman History of the present-day Slovenian territory
- 8. Late Antique settlement of Slovenia and its placement in the settlement structure of the Roman Empire
- 9. Economic and social dynamics on the territory of Slovenia in the early Middle Ages
- 10. The environment in archaeological periods
  - o Archaeozoological research
  - Palynological research

# The archaeological portrait of the Slovenian landscapes between 5th and 2nd millennium BC



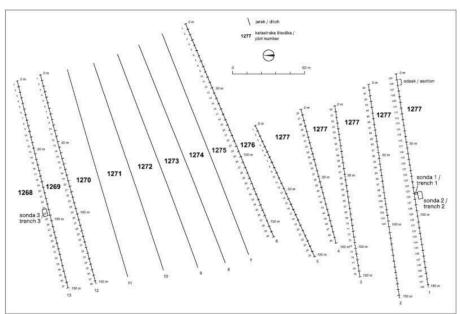
Spaha above Brezovica pri Predgradu. A ladle with perforated handle is a typical pottery form in the central Danube area during the 5th millennium BC.

Several potsherds reveal the occupation phase in the 4th millennium BC.

Drawing: Tamara Korošec.

The research will focus on investigation of the chronology, the settlement pattern dynamics, the economy and the palaeoenvironment in Slovenia during the New Stone Age and the Copper Age.

One of the main topics of our research are the interdisciplinary investigations of the pile-dwellings on the Ljubljansko barje (Ljubljana Moor) where the trial trenches will be executed providing high quality data for the palaeoenvironmental studies and the studies of then society, economy etc.



A plan of the Stare gmajne site. Dendrochronological researches have revealed two distinct occupation phases. The western part of the site was settled during the 34th century BC for the first time. The 2nd occupation phase has to be set into the 32nd century BC when the western and eastern parts were occupied.

The dendrochronological investigations of the archaeological wood from the pile-dwellings Maharski prekop, Založnica and Stare gmajne will be published and the elongated dendrochronogical curves for the 4th and 3rd millennium BC will be performed which will be very important for Slovenian prehistoric archaeology and also for the larger geographical area.

Our research will extend to other landscapes in Slovenia. We are planning to publish the results of an interdisciplinary team-work investigation of the material from an old archaeological excavation carried out more than 20 years ago on the hilltop settlement Spaha above Brezovica pri Predgradu in Koèevje region of southern Slovenia and the archaeological material from different sites of northeastern Slovenia.

The programme will be completed by two syntheses concerning the improvement of the chronology of the pile-dwellings period on the Ljubljansko barje and the review of the New Stone Age and Copper Age in the north-eastern Slovenia.





A stone crucible from Stare gmajne (34th century BC). On the pile-dwellings at Ljubljansko barje practised with the copper metallurgy at least from the 4th millennium onward.

Contact: Anton Velušček

# North-eastern Slovenia in the Late Bronze Age

Research of the settlement structures and dynamics in the period of the Late Bronze Age including the phenomenon of the first appearance of iron is carrying on within the programme. It will encompass three levels. On local level, publishing the results of fieldwork and excavated material from three most important settlement complexes in Štajerska region that could be determined as centres of social power, according to present knowledge is anticipated. Those are: Ormož, Ptuj and Gornja Radgona. Each one will be represented in individual publication.

On a regional level, a common database of settlement structures from Late Bronze Age in North-eastern Slovenia is planned. It will encompass fortified settlements, lowland settlements, cemeteries, hoards and isolated finds. Environment data will also be added to this computer database, which will represent the basis for further typological, chronological and spatial analyses.

On the third and the highest level, the final synthesis of the result will follow. The settlement structures, their typology and chronology will be represented in a special monograph. We intend to analyse the principles of settlement dynamics, and to consider economic background and impact of environment on settlement pattern. The ultimate goal is to represent cultural historical situation in the Late Bronze Age in North-eastern Slovenia.



Ormož. Reconstuction.

Contact: Janez Dular

# South-eastern Alps in the 2nd and 1st centuries BC

The aim of the research is to outline the historical development in the south-eastern Alps in the last two centuries BC on the basis of the archaeological sources. These troubled times are characterized by a repeated colonization of the hill-top settlements, varying cultural orientation of particular territories (aligned with Central Europe or with Italy), the appearance of local forms of material culture, a gradually Romanising acculturation, the Roman occupation, and the preservation of some of the pre -Roman cultural elements in the first decades after the occupation.

The first part of the programme will comprise a preparation of a database, which will include all important data about the sites in the defined territory and will be a basis for the catalogue of the sites and for the comparative analyses. We shall consider the settlements, the cemeteries, the sanctuaries, the sites associated with water, and the hoards.



The warrior Grave 37 from Verdun

The second part of the programme will be the publication of some key archaeological sources and the analytical studies of some selected types of small finds.

In the final monograph we shall date the sites relatively and absolutely, make cultural-historical comparisons between the sites and between the territorial units, present the commercial currents and the expansion of cultural influences, as well as outline historical development in the south-eastern Alps in the 2nd and 1st centuries BC.

# Contact: Dragan Božič

# The Romanisation processes on the territory of Slovenia

A large spectrum of the gradual changes will be researched: from the first contacts between the Romans and the natives to the establishment of the Roman state and the general acceptance of the Roman way of life.

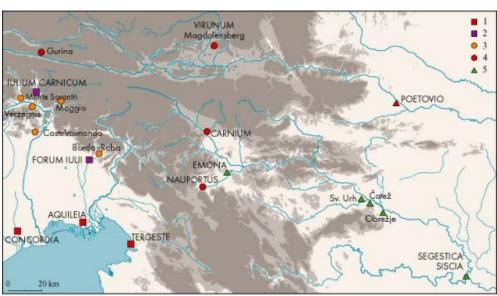
The research will be focused on the two important archaeological sites. Nauportus (present-day Vrhnika) was the strategic key-point on the old trade route connecting Italy and the middle Danubian area. Analysis of the new archaeological, archeozoological and archaeothanical data will contribute to the chronology, to the better understanding of the human impact on the environment, to the study of migrations, economy, trade and architecture, especially during the period of the 1st cent. AD.



SE view to Razdrto pass and Nanos. Photo: A. Bavdek.

Poetovio (present-day Ptuj) was one of the most important administrative centres in the large region between the Balkans and the Danube from the 2nd cent. AD. The study of the urban development in the early phase of Poetovio (1st and 2nd cent. AD) represents the next goal of the proposed programme, as well as the analysis and the publication of the field documentation and the material from one of the archaeological sites in Rabelèja vas (a part of Poetovio).

The new data from Nauportus and Poetovio and the comparative analyses with the neighbouring regions will enable the new evaluation of the Early Roman period on the territory of the south eastern Alps.

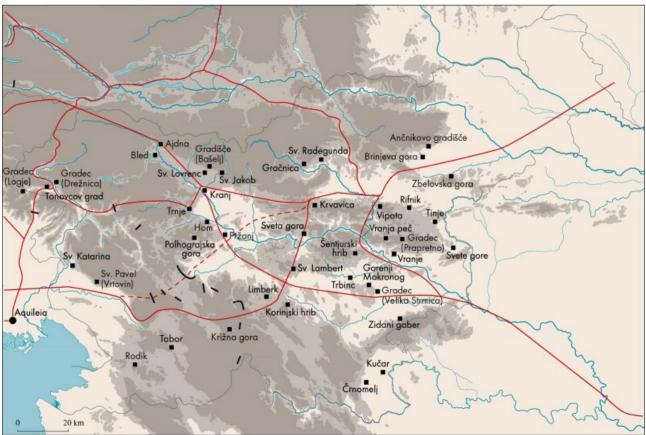


Early Roman fortification.

Contact: Jana Horvat

# Late Antique settlement of Slovenia and its placement in the settlement structure of the Roman Empire

Various research procedures are included in the study of the Late Antique settlement pattern (analyse of already accumulated data, topography, use of LIDAR technology, site measurements, key site excavations – Tonovcov grad).



Late Antique settlement of Slovenia.

A comparative analysis of fortified hilltop settlements will help improve their typology and chronology, using the study of small finds we will establish level of settlement self-sufficiency and the placement of the settlements into the commercial network of the period. Together with rescue excavations in the lowlands of Slovenian countryside and in the Roman towns, which uncover the settlement pattern of the beginnings of the Late Antique period, we will be able to evaluate the settlement structure and its phenomena.

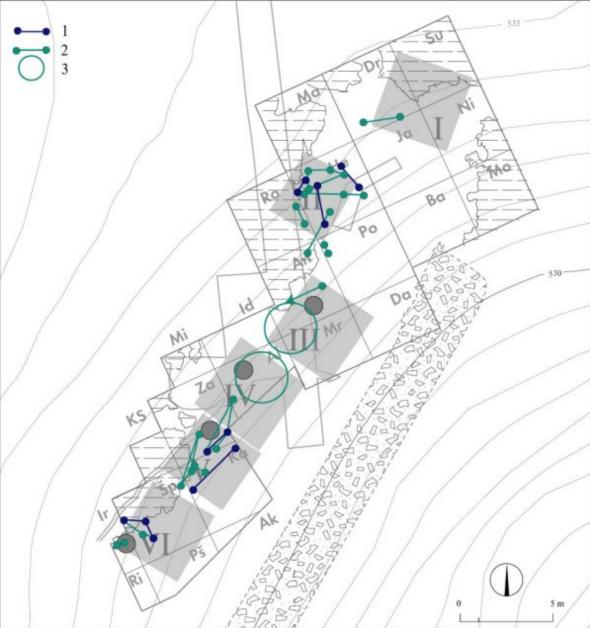
Two important Late Antique fortified settlements in Slovenia will be published as monographs: Korinjski hrib which best represents the last type of military fortifications in the Southeast Alpine region and Zidani gaber, which shows a strong presence of foreign ethnic groups, mostly Lombards and Goths, next to the Roman inhabitants.

As the most important result of the programme we will present a monograph about Late Antique settlement of the Roman Empire with an emphasis on the Alpine and Balkan regions.

#### Contact:

Slavko Ciglenečki

# **Economic and social dynamics on the territory of Slovenia in the early Middle Ages**



Bled, Pristava: scatter of the pottery remains inside the buildings.

The aim of the research is to throw light upon the economic and social dynamics on the territory of Slovenia in the early Middle Ages with the help of the analysis of settlement- and burial structures. It will be done in three stages.

The first stage will be creating a digital database of the early medieval archaeological heritage on the territory of Slovenia. The published data about settlements, cemeteries, hoards, churches and isolated finds will be included. The separated tables of findspots, graves, finds and literature will be related. Adequate classification and indexation of material as well as its localization will be done.

Chronological analysis of findspots and finds will be the second stage.

The final synthesis will be the third stage. Burial- and settlement structures will be analysed as well as theirs forms and dynamics in the researched time -span. The relations between archaeological structures and environment will be considered. At the end the picture of economic and social dynamics will be put together. The early medieval roots of Slovenian identity will be elucidated, special attention will be paid to the question of relations between old-settlers and Slavs.

Contact:
Andrej Pleterski

### Archaeozoological research



Artefact of basal beam part of antler red deer from Stare gmajne (photo M. Zaplatil) and horse (Equus caballus) incisive from Zalog (photo R. Erjavec).

The programme is aimed at studying the natural and cultural environment in the time period between the Middle Palaeolithic and the Middle Ages. The natural environment will be inferred by studying small mammal remains, with special attention being paid to the cause-consequence relation between the natural habitat and the economy (e.g. alimentary customs, type of animal keeping/husbandry, importance of hunting etc.). The research on cultural environment will address the question of the economic base of complex societies and past human activities. Taphonomically oriented studies will concentrate on the associations and spatial patterning of animal bones and other organic refuse, architecture and artifacts/artifactual rubbish. Special emphasis will be given to the analysis of diachronic changes in size and shape of domesticate skeletal elements by the means of detailed morphometric studies. As part of this study a special database will be built to store all the collected metric data. The above data will allow obtaining deeper insights into the ways in which meat and other animal products are exchanged between producers and consumers, social status of settlements and its inhabitants, "ethnicity" etc.

#### Contact: Borut Toškan

### Palynological research

Palynological research will focus on studies of Late glacial and Holocene palaeoenvironment and human impact on the vegetation at Ljubljansko barje, Blejski kot and Bela krajina regions of Slovenia. Research will include pollen analysis of sedimentary sequences, collected at palaeoecological and archaeological sites and regular monitoring of pollen rain in all study areas.

A book addressing the main theoretical and methodological issues of palaeobotanical and archaeozoological research, including numerous case studies, will be published. This multidisciplinary handbook of palaeoecology could also be used for teaching archaeology and biology.



Palynological coring and sampling

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Contact: Maja Andrič