

GEOGRAPHICAL ASPECTS REGARDING THE ROMAN LIMES IN THE COUNTY OF BISTRIȚA-NĂȘĂUD (ROMANIA). CASE STUDY: THE SOMEȘ LIMES (SPERMEZEU-PERIȘOR-ZAGRA-SALVA-NĂȘĂUD SECTION)

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Abstract: The Roman limes from the county of Bistrița-Năsăud is part of the Prolissensis Limes and extends along a line connecting the villages Ciceu Corabia, Negriștei, Ciceu Poieni, Dobric, Spermezeu, Zagra, Salva, Năsăud, Livezile, and Orheiul Bistriței. It features specific elements, represented by Roman roads, watchtowers, burgi, and castra. Geographically, this section of the limes lies in a hilly area, represented by the Someșul Mare Hills (Ciceu Hills, Suplai Hills, Năsăud Hills) and the Bistrița Hills. The touristic and leisure value of the Limes from the county of Bistrița-Năsăud is given by the geographical features of the region (relief, climate, vegetation) and by the Roman vestiges discovered in the area. The present paper focus on the limes section stretching between the Ilișua Valley (at Spermezeu) and the Someșul Mare River (at Năsăud), and aims to identify, catalogue, and evaluate elements of the Roman limes, and to elaborate touristic utilisation strategies of the archaeological sites. The team's research identified good and very good preserved Roman tower substructures, allowing the precise mapping of the Roman limes line in the north-eastern part of the Bistrița-Năsăud County.

Key words: limes romanus, roman wach tower, roman heritage, geoarchaeology, archaeological site, cultural tourism,

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INTRODUCTION

The Roman limes (limes romanus) represents the fortified frontier of the Roman Empire, stretching from the north of Great Britain (Limes Britannicus), across Europe (Limes Germanicus, Limes Norici, Limes Pannonicus, Limes Dacicus), to the Black Sea (Limes Moesiaie) and further towards the Red Sea (Limes Arabicus) and northern Africa (Limes Tripolitanus), back to the Atlantic, over a length totalising over 5000 kilometres (figure 1).

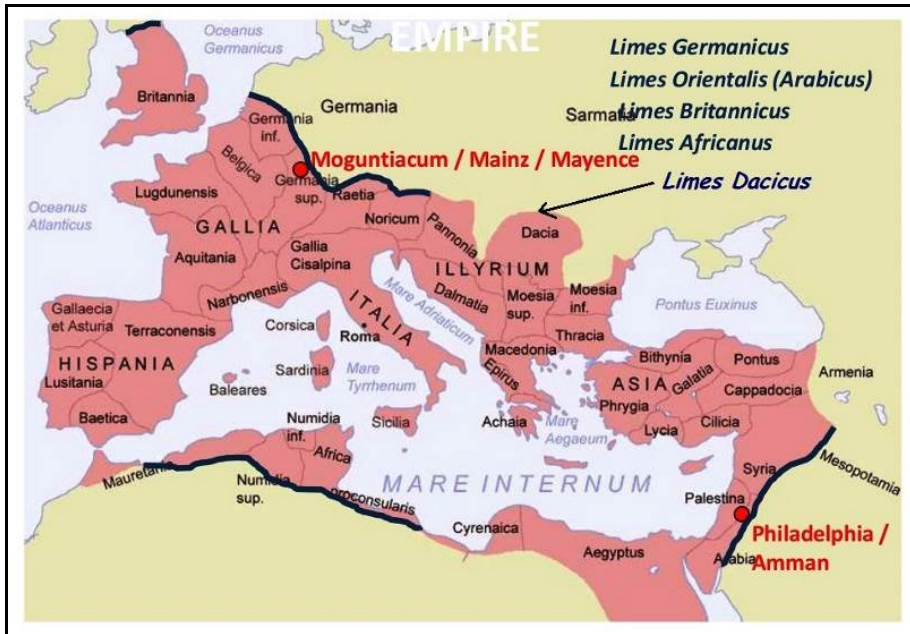


Figure 1. The Roman Empire and its frontiers¹

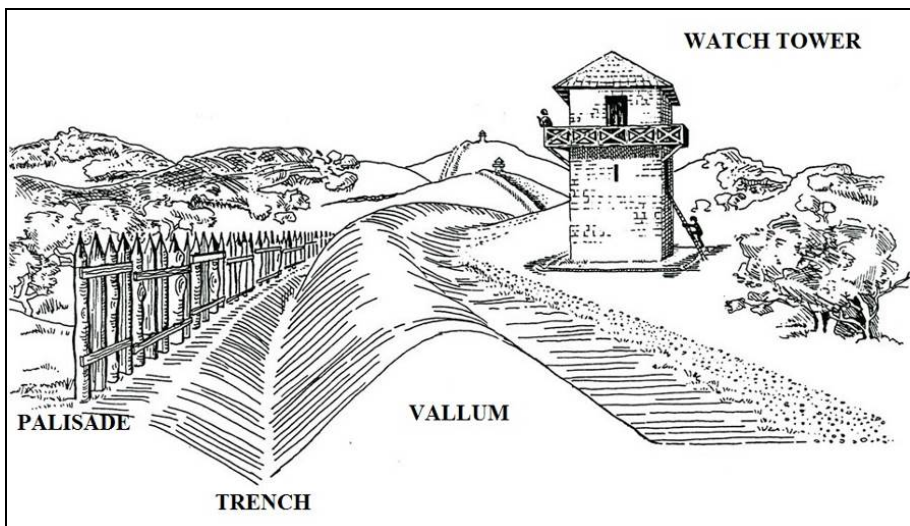


Figure 2. The Depiction of a Roman limes section²

¹ <http://www.slideshare.net/shaimaa93tomas-limesneu>

From a structural and functional viewpoint, the limes comprised the following elements: a paved road or an earth road, an earth wall (vallum) with a height of approximately 3 metres and 10-12 m thick, fortified with wooden palisades or stone walls, watch towers, small fortifications, castra or military garrisons, civilian settlements, and non-Roman structures (figure 2). The area covered by the Roman limes stretched between 15 and 40 km, according to natural conditions. Thus, the limes represented an interface between the territories lying in front of it, and beyond it, respectively, and its complexity was dictated by topography (relief, water bodies, vegetation), climate, economy (resources, economic activities), and society (nearby populations).

In present-day Romania the former border of the Roman province of Dacia lies the Limes Dacicus, comprising three sections: Limes Porolissensis, Limes Alutanus, and Limes Transalutanus (figure 3).

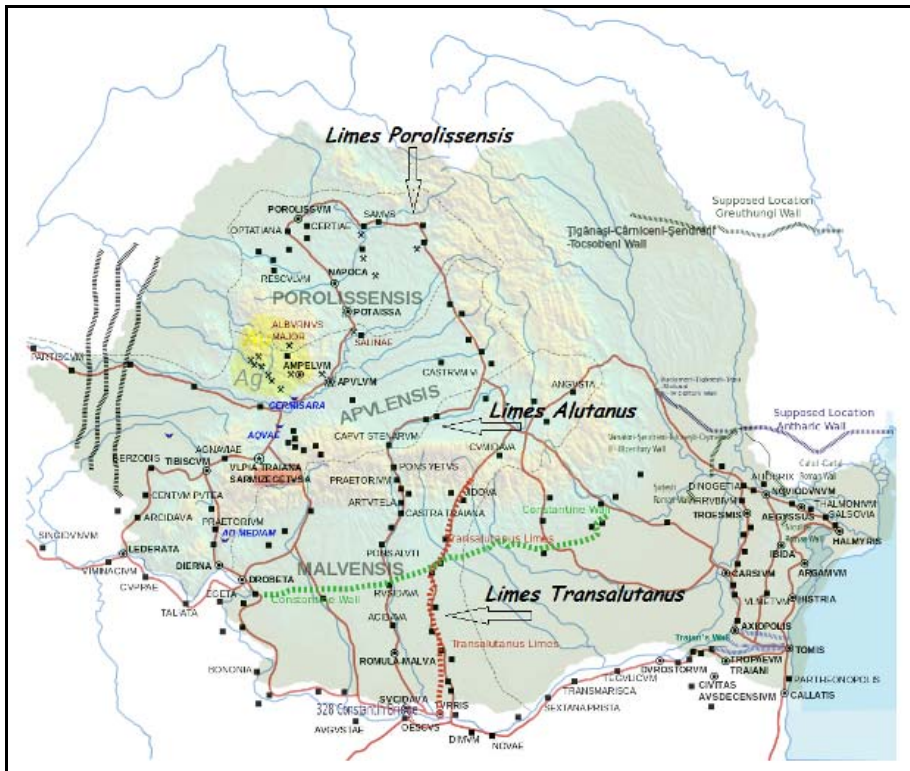


Figure 3. The Roman province of Dacia and its limes sections³

This paper deals with a tract of the Limes Porolissensis, located in the county of Bistrița-Năsăud, between Spermezeu and Năsăud, studied as part of the project for the valorisation of the Roman limes from the territory of the Bistrița-Năsăud County (figure 4).

The Limes Porolissensis extended across the counties of Sălaj (comprising the castra from Negreni, Buciumi, Largiana-Românași, Certina-Romița, Jac, Tihău), Cluj (with the castrum Samum, from Cetățele), Bistrița-Năsăud (the castrum Arcobara, near Ilișua, and the castra from Livezile and Orheiul Bistriței), and Mureș (the castrum from Brâncovenеști).

² <http://www.raybishophistory.co.uk/german-frontier-of-the-roman-empire/a-landscape-of-history-and-romance/overview-of-the-limes-second-century-ad-2/>

³ https://en.wikipedia.org/wiki/Wikipedia:WikiProject_Dacia/Limes_Dacicus

The objective of this study was to identify the route of the Roman limes within the county of Bistrița-Năsăud, and to identify, chart, inventory, and evaluate the findings regarding the Roman heritage in this sector, for the purpose of touristic utilisation.

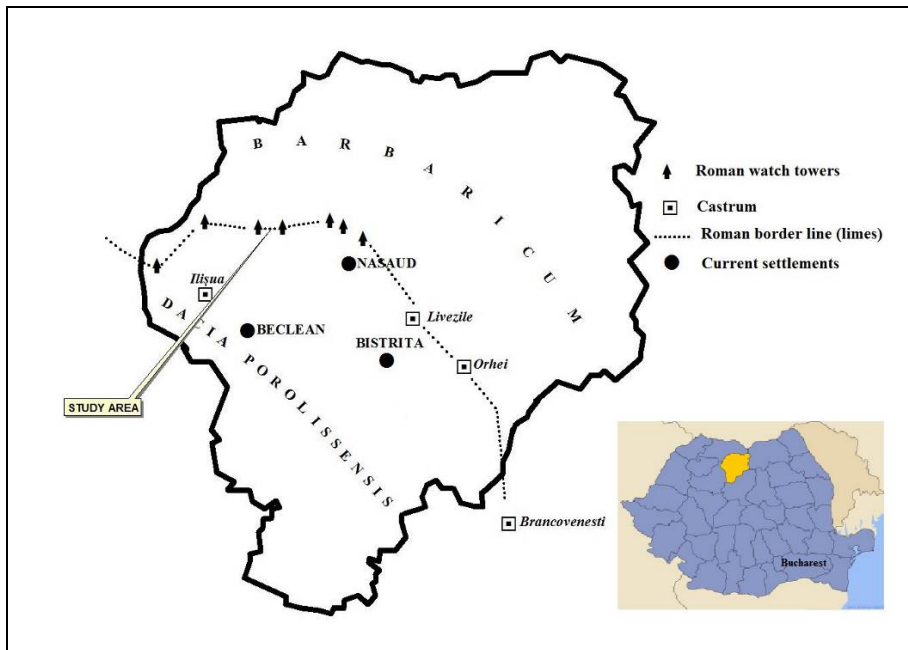


Figure 4. The Roman limes on the territory of the Bistrița-Năsăud County

METHODOLOGY

This paper was realised by observing following steps: consulting literature on the Roman limes and Roman military fortifications (Smith, 1859; Johnson, 1983; Baatz, 1993; Keppie, 1994; Whittaker, 1994; Hanson & Friel, 1995; Shotton, 1996; Wells, 1999; Wamser, 2000; Wells, 2000; Bell, 2001; James, 2002; Miranda, 2002; Breeze, 2003; Breeze & Jilek, 2008; Campbell, 2009); consulting literature on the Roman province of Dacia, the Roman limes, and the Roman military fortifications in Romania (Vlădescu, 1986; Macrea et al., 1993; Fodorean, 2006; Madgearu, 2008; Țentea et al., 2009; Petolescu, 2010); consulting papers regarding the Roman limes on the territory of the Bistrița-Năsăud County (Ferenczi et al., 1974; Ferenczi, 1976; Marinescu, 1989); consulting some treatises commissioned by the communes located in the proximity of the limes in the Bistrița-Năsăud County (Prahase & Urs, 1997; Rodilă, 2010; Falub et al., 2011; Mureșan, 2011; Moldovan & Moldovan, 2011); consulting some geography literature regarding the studied area, i.e. the Someșului Mare Hills sector within the Transylvanian Plateau (Irimuș, 1998; Pop, 2012); creating an inventory file of the archaeological sites; creating a picture and map library of the studied area (maps, sketches, profiles); performing geo-archaeological field research along the Roman limes in the Bistrița-Năsăud County, collecting information from the local population regarding toponymy and archaeological evidence, and locating, making an inventory, evaluating, measuring, and mapping the discovered archaeological sites.

STUDY AREA

The Roman limes on the territory of the Bistrița-Năsăud County is part of the Limes Porolissensis section, and is located on the following alignment: Culmea Ciceului – Dumbrăveni – Negrileşti – Ciceu Poieni – Sita Spermezeului – Perișor – Zagra – Salva – Năsăud – Livezile – Orheiul Bistriței (figure 4).

The research presented in this paper covered the sector between the Ilișua Valley (Sita Spermezeului) and the Someșul Mare River (Năsăud), an area known as the Suplai Hills and the Năsăud Hills (figure 5).

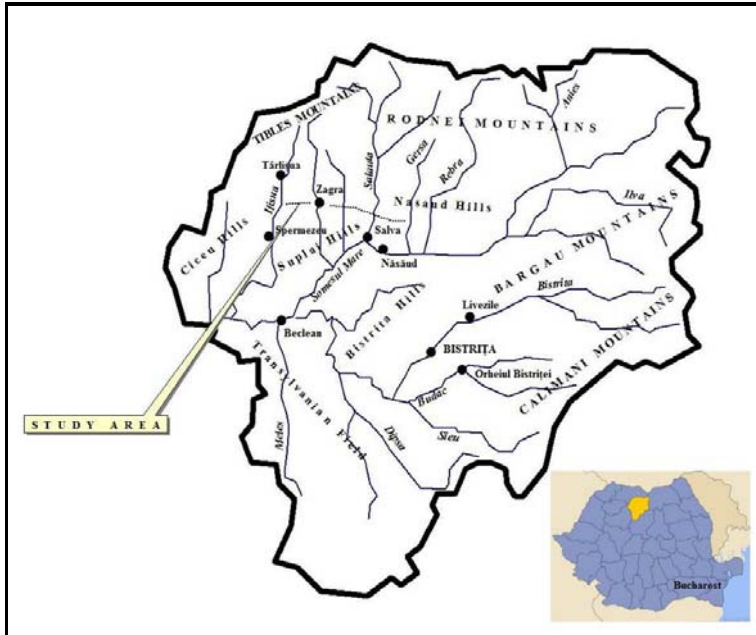


Figure 5. Geographic localization of the research area in the Bistrița-Năsăud County

RESULTS AND DISCUSSIONS

The fieldwork conducted with the students from the Faculty of Geography of the Babeș-Bolyai University Cluj-Napoca, Tourism Geography Department, resulted in discovering, localising, measuring, inventorying, and evaluating several Roman tower substructures. Based on these findings, the team was able to trace the Roman border line in the sector between the Ilișua Valley (Sita) and the Someșul Mare River (Năsăud) (figure 6, table 1).

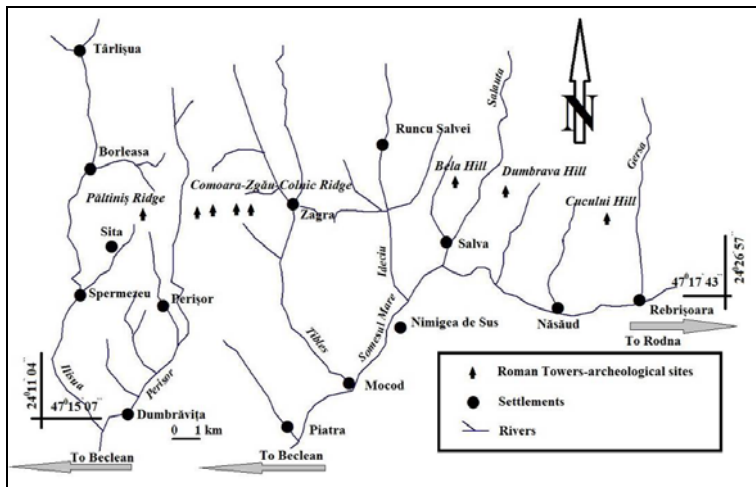


Figure 6. The Roman limes from the Bistrița-Năsăud County, section Spermezeu-Năsăud

Table 1. Inventory and primary evaluation file of the archaeological sites

No.	Place	Site name	Altitude (m)	Finding	GPS coordinates	State of preservation	Access
1	Sita	Culmea Păltiniș	702	Roman tower substructure	N 47°19.438' E 24°12.117'	Very good	Field road
2	Perișor	Corobană		Roman tower substructure	N 47°19.340' E 24°13.970'	Good	Footpath
		Dealul Hotarelor	761	Roman tower substructure	N 47°19.403' E 24°14.132'	Good	Footpath
		Vf. Zgău	759	Roman tower substructure	N 47°19.295' E 24°14.774'	Very good	Footpath
3	Zagra	Dosul Colnicului	680	Roman tower substructure	N 47°19.351' E 24°15.125'	Very good	Footpath, Field road
4	Salva	Dealul Bela	546	Roman tower substructure	N 47°20.128' E 24°21.408'	Good	Footpath, Field road
		Dealul Miga	698	Roman tower substructure	N 47°19.265' E 24°23.008'	Good	Field road
5	Năsăud	Dealul Cucului	735	Roman tower substructure	N 47°18.448' E 24°26.107'	Very good	Footpath, Field road

In order to make an inventory and to individually evaluate the archaeological sites, a more detailed file was created, structured as follows:

A) Geographical attributes:

- 1) **Type of site / objective:** road, earth wall, trench, tower, burgus, castrum;
- 2) **Geographical location:** administrative unit, relief unit;
- 3) **Geographic coordinates:** latitude, longitude;
- 4) **Geology:** petrographic underground;
- 5) **Relief:** crest, summit, plateau, slope;
- 6) **Nearby landmarks:** valleys, crests, settlements, transport routes.

B) Geo-archaeological specifications:

- 1) **Shape of the archaeological object:** circular, linear, rectangular;
- 2) **Detail morphology:** excavations, steps, hillocks, trenches, enclosures, levelled surfaces;
- 3) **Dimensions:** length, width, height, depth;
- 4) **Land use:** arable, pasture, hay meadow, woodland;
- 5) **Human intervention:** levelling, excavations, road construction, ploughing, grazing, forestry.

C) Evaluation grid:

- 1) **Historic value:** context, integrity, relevance;
- 2) **Aesthetic value:** visibility, shape, landscape integration, scenic lookouts;
- 3) **Cultural and educational value:** information, practical training, events;
- 4) **Touristic value:** access roads, tour integration, advertising, development (information panels, signposts, markings), accommodation (boarding houses, chalets);
- 5) **Economic value:** extent and ways of touristic utilisation.

Geographically, this section of the Roman limes expands over a hill region (Suplai Hills, Năsăud Hills) with north-south oriented crests, and heights between 500 and 800 metres, shaped on conglomerate and Langhian sandstone (the Hida stratum). The relief energy lies between 250 and 350 m, and the slopes have angles of 20°-35°. These hill ridges are separated by deep valleys, tributary to the Someșul Mare River: Ilișua, Perișor, Țibleș, Ideciu, Sălăuța, Podului, Caselor and Gersa.

The discovered Roman tower substructures are situated on levelled hillcrests (Pălteniș, Dosu Colnicului, Dealul Cucului) and on rounded summits (Hotarelor, Zgău, Bela, Dumbrava), belonging to the upper erosion level of the Transylvanian Plateau (Lower Pliocene). These locations permitted the surveillance of the neighbouring valleys (Ilișua, Curtuiuș, Sălăuța, Someșul Mare) and the hills in the north to the contact with the Țibleș and Rodna mountains (figure 7, 8).

These hillcrests are oriented E-W (Pălteniș), WNW-ESE (Hotarelor-Zgău, Dosu Colnicului), and NNE-SSW (Bela Hill, Dumbrava Hill, Cucului Hill), and the summits on which the Roman towers were erected form a clear alignment with a general west-east orientation (fig. 9). The distance between the towers varies between 600-800 m (Hotarelor Pk. – Zgău Pk. – Dosul Colnicului) and 2-4 km (Pălteniș Crest – Hotarelor Pk., Bela Hill – Miga Hill – Cucului Hill).

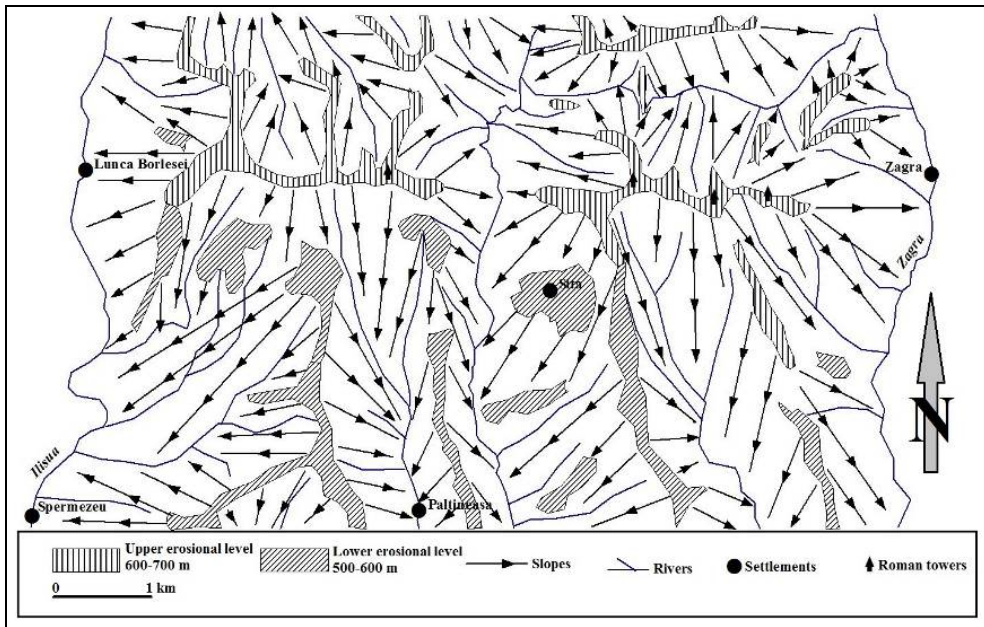


Figure 7. The geomorphologic conditions in the area of the Roman limes from the Bistrița-Năsăud County, Ilișua-Zagra sector

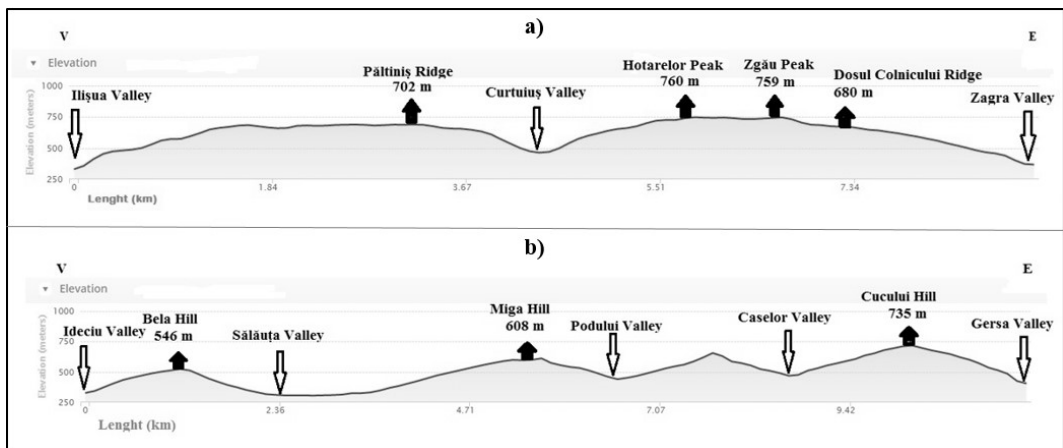


Figure 8. Geomorphologic profiles of the Roman limes from the Bistrița-Năsăud County in the sectors Sita-Zagra (a), and Ideciu-Gersa (b)

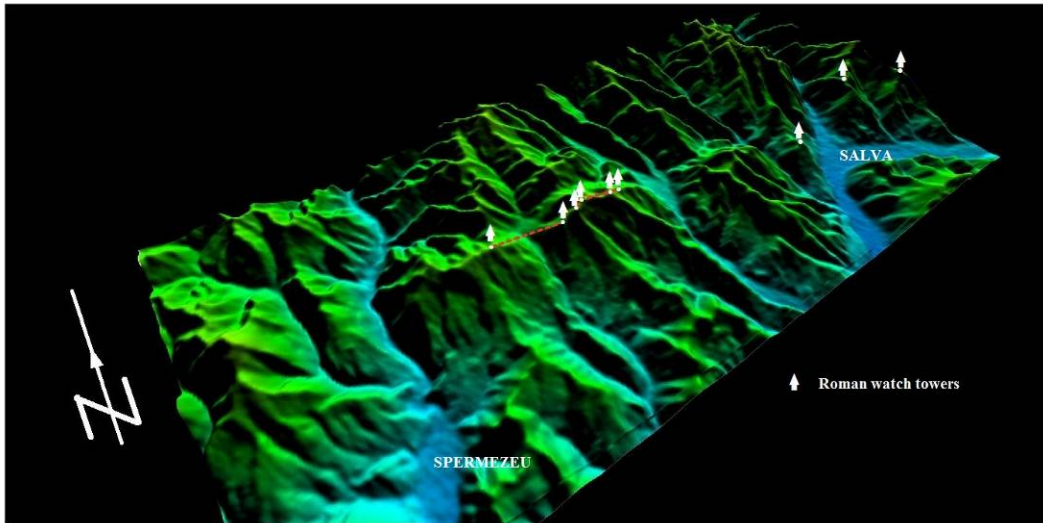


Figure 9. Position of the Roman towers of the limes in the sector Spermezeu-Năsăud

Geo-archaeologically, the Roman towers substructures show a circular wall consisting of earth and local, rounded rock (conglomerates, sandstone), 1-3 m high and 13-15 m in diameter. These walls enclose a space of 1-2 m deep and 4-6 m wide of various shapes: circular (Pălteniș, Dosul Colnicului, Cucului Hill), oval (Miga Hill), on irregular (Hotarelor Hill, Zgău Pk.) (figure 10).



Figure 10. The substructure of the Roman tower on the Pălteniș Crest, at Sita Spermezeului

These structures are clearly visible where the vegetation covering them is grass (Pălteniș Crest, Miga Hill, Cucului Hill), but concealed where they are masked by shrubs and trees (Hotarelor Hill, Zgău Pk., Dosul Colnicului). In each instance, the location of these structures allows a 360-degree view on the surrounding regions: hillcrests, mountains (Țibleș, Rodnei), and valleys (Ilișua, Curtuiș, Zagra, Sălăuța, Someșul Mare, Gersa).

In retrospect, the archaeological findings bring proof to the fact that, in their effort to establish the border, Roman topographers considered the relief in this sector of the Roman province Dacia Porolissensis, building the towers on the highest and also most accessible terrain

(crests, plateaus, summits), so that to have a wide perspective over the surrounding regions and especially over the northern parts (Barbaricum), where the free Dacians lived. These towers were linked together by stone or earth roads, traces of which can still be seen in some places (Ciceu Corabia, Ciceu Poieni, Culmea Păltinişului). The watchtowers from this sector were coordinated militarily and administratively by the castrum from Ilişua, situated 14-16 km to the south.

CONCLUSIONS

The Roman limes in the Bistriţa-Năsăud County stretches along the line Ciceu Corabia – Negrileşti – Ciceu Poieni – Dobric – Spermezeu – Zagra – Salva – Năsăud – Livezile – Orheiul Bistriţei, showing the following geographical features:

- it lies in a hill region, namely the Someşul Mare Hills (Ciceu Hills, Suplai Hills, Năsăud Hills) and the Bistriţa Hills, composed of Miocene sediments (conglomerates, sandstone, Langhian marl clay) and volcanic rocks (Serravallian / Pannonian rhyodacite);
- the terrain consists of polycyclic levelled, elongated hill ridges with nearly horizontal sections, cols, summits (flattened or rounded), volcanic massifs (Măgura Ciceului), gentle slopes, large, deep valleys, and erosional basins with settlements within (Negrileşti, Breaza, Ciceu Poieni);
- the vegetation consists of deciduous forests (oak, hornbeam, beech), pastures and hill meadows;
- the touristic and leisure value is given by the high hills landscape, a sedative, slightly tonic-stimulating climate, the alternation of woods and meadows, and the presence of erosional landforms: peaks, escarpments, sandstone concretions (i.e. at Ciceu Poieni), micro-canyons (Ciceu-Poieni), and rock formations (CiceuPoieni, Ciceu Corabia etc.).

The present paper focuses on the limes section stretching between the Ilişua Valley (at Spermezeu) and the Someşul Mare River (at Năsăud), and observed the following goals:

a) To identify elements special to the Roman limes:

- Roman roads segments;
- Roman towers substructures;
- Burgi;
- Castras of auxiliary troops;
- Other elements;

b) To make an inventory of and to evaluate the identified elements:

- Geographic position;
- State of preservation;
- Integrity;
- Relevance;
- Visibility;
- Proximity to settlements and access roads;
- Restauration possibilities and measures;
- Association with natural (relief forms, flora, fauna) and cultural (folk events, traditions and rites, rural architecture) attractions;

c) To elaborate strategies for the touristic valorisation of the archaeological sites:

- Spatial demarcation and valorisation;
- Establishment of access roads (footpaths, roads);
- Signage (information panels, signposts, markings);
- Reconstruction of the Roman watchtowers;
- Advertising the findings and neighbouring settlements as attractive objectives for cultural-historic tourism, leisure and adventure tourism (flyers, maps, movie videos);
- Starting procedures to include the Roman limes from Bistriţa-Năsăud County in a possible tourist archaeopark;
- Establishing several theme routes;

Identifying cultural and educational activities to utilise the archaeological sites (visits, excursions, competitions, events), and leisure activities (hiking, cycling, horse-riding, coach tours,

official plants harvesting, adventure and endurance leisure, cultural and archaeological tourism). The actors involved in the project of touristic utilisation of the Roman limes from the county of Bistrița-Năsăud are: The Ministry for Culture, the Bistrița-Năsăud County Council, the town halls of the communes covered by the limes, the Bistrița-Năsăud Museum Complex, schools and universities, tourism organisations, and NGOs (tourism associations).

Aknowlegments

The authors wish to thank Adrian Onofreiu, PhD, from Bistrița-Năsăud County Archives for his helpful comments on an earlier draft of this paper. His contribution presents some results from the research project *The Valorisation and promotion of The Roman Limes from Bistrița-Năsăud County* (2015), in partnership with the Bistrița-Năsăud County Museum, the Babeș-Bolyai University and the Bistrița-Năsăud County Council. The authors acknowledge to anonymous reviewers for their thoughtful suggestions and comments.

REFERENCES

- Baatz D. (1993), *Der römische Limes: Archäologische Ausflüge zwischen Rhein und Donau [The Roman Limes: Archaeological Tours between the Rhine and Danube]*, 3rd ed. Berlin: Gebr. Mann.
- Bell A. (2001), *Castra et urbs romana: An Examination of the Common Features of Roman Settlements in Italy and the Empire and a System to aid in the Discovery of their Origins*, CAC Undergraduate Essay Contest for 2000-2001, Classical Association of Canada.
- Breeze D. J. (2003), *Hadrian's Wall*, 2nd ed. London: English Heritage.
- Breeze D. J., Jilek Sonja (editors) (2008), *Frontiers of the Roman Empire*, The European dimension of a World Heritage Site. Culture 2000, Historic Scotland.
- Campbell D. B. (2009), *Roman Auxiliary Forts 27 BC-AD 378*, Oxford: Osprey Publishing.
- Falub V., Știr D., Știr Beatrice (2011), *Ciceu-Poieni. Istorie și credință [Ciceu-Poieni. History and Faith]*, Editura Eikon, Cluj-Napoca.
- Ferenczi G., Ferenczi Șt., Baias A. (1974), *Investigații noi pe limes-ul de nord și nord-est al Daciei Porolissensis [New investigation on the north and northeast limes of Dacia Porolissensis]*, File de istorie, III, Muzeul de Istorie, Bistrița.
- Ferenczi I. (1976), *Contribuții la cunoașterea limes-ului roman de la nordul Someșului Mare [Contributions to the knowledge of the Roman limes from north of Someșul Mare River]*, File de istorie, IV, Muzeul de Istorie, Bistrița, p. 107-130.
- Fodorean Fl. (2006), *Drumurile din Dacia Romană [The Roads from Roman Dacia]*, Editura Napoca Star, Cluj-Napoca.
- Găzdac C., Gaiu C., Marchiș Elena (2011), *Arcobadara (Ilișua)*, Mega Publishing House, Cluj-Napoca.
- Hanson W.S., Friel J.G.P. (1995), *Westerton: A Roman Watchtower on the Gask Frontier*, Proceedings of the Society of Antiquaries of Scotland, 125, 499-519.
- Irimuş A. I. (1998), *Relieful pe domuri și cute diapire în Depresiunea Transilvaniei [The Relief on domes and diapirs in Transylvania Depression]*, Editura Presa Universitară Clujeană, Cluj-Napoca.
- James S. (2002), *Writing the Legions: The Development and Future of Roman Military Studies in Britain*, The Archaeological Journal, 159, 1-58.
- Johnson Anne (1983), *Roman Forts of the 1st and 2nd centuries AD in Britain and the German Provinces*, London: Adam & Charles Black.
- Keppie L. (1994), *The Making of the Roman Army from Republic to Empire*, New York: Barnes and Noble Books.
- Macrea M., Moțu I., Gudea N. (1993), *Praetorium - castrul și așezarea romană de la Mehadia [Praetorium - Roman castra and roman settlement at Mehadia]*, Editura Academiei Române, București.
- Madgearu A. (2008), *Istoria Militară a Daciei Post Romane 275-376 [Military history of Post-Romanian Dacia 275-376]*, Editura Cetatea de Scaun, Târgoviște.
- Marinescu Gh. (1989), *Cercetări și descoperiri arheologice de epocă romană în nord-estul Transilvaniei [Research and archaeological discoveries from roman period in northeastern Transylvania]*, File de istorie, VI, Muzeul de Istorie, Bistrița, p.11-12.
- Miranda F. (2002), *Castra et Coloniae: The Role of the Roman Army in the Romanization and Urbanization of Spain*, Quaestio: The UCLA Undergraduate History Journal, Phi Alpha Theta: History Honors Society, UCLA Theta Upsilon Chapter, UCLA Department of History.
- Moldovan Fl., Moldovan Marcela (2011), *Perișor-repere monografice [Perișor- monographic landmark]*, vol. I-II. Editura Eikon, Cluj-Napoca.
- Mureșan V. (2011), *Dor de acasă. Ciceu-Mihăiești-studiu monografic [Miss home. Ciceu-Mihăiești-monographic study]*, Editura Accent, Cluj-Napoca.
- Petolescu C.C. (2010), *Dacia - Un mileniu de istorie [Dacia - A millennium of history]*, Editura Academiei Române, București.

- Pop Gr. (2012), *Depresiunea Transilvaniei [Transylvanian Depression]*, Editura Presa Universitară Clujeană, Cluj-Napoca.
- Prahase M., Urs G. (1997), *Zagra-o monografie posibilă [Zagra- a possible monograph]*, Editura Carpatica, Cluj-Napoca.
- Rodilă T. (2010), *Satul Breaza-o istorie demnă și milenară [Breaza village- a dignified and millenary history]*, Editura Eikon, Cluj-Napoca.
- Shotter D. (1996), *The Roman Frontier in Britain*, Preston, England: Carnegie Publishing.
- Smith W. (1859), *A Dictionary of Greek and Roman Antiquities*, London: John Murray
- Țentea O., Popescu M.F., Opreș I.C., Ștefan D. (2009), *Raport științific privind derularea proiectului Strategii defensive și politici transfrontaliere. Integrarea spațiului Dunării de Jos în civilizația romană (STRATEG), Faza IV, Elaborarea de modele conceptuale referitoare la amplasarea fortificațiilor militare pe teren [Scientific Report on the project Defensive strategies and cross-border policies. Integration of the Lower Danube area in the Roman civilization (STRATEG), Phase IV Development of conceptual models regarding the location of military fortifications on the ground]*.
- Vlădescu C.M. (1986), *Fortificațiile romane din Dacia Inferior [The roman fortifications of Lower Dacia]*, Editura Scrisul Românesc, București.
- Wamser L. (editor) (2000), *Die Römer zwischen Alpen und Nordmeer [The Romans between the Alps and North Sea]*, Mainz: Philipp von Zabern.
- Wells P.S. (1999), *The Barbarians Speak: How the Conquered Peoples Shaped Roman Europe*, Princeton, NJ: Princeton University Press.
- Wells P.S. (2000), *The Limes and Hadrians Wall*, vol.47, no.1, Expedition.
- Whittaker C. R. (1994), *Frontiers of the Roman Empire*, Baltimore, MD: Johns Hopkins University Press.
- Zăgreanu R. (2013), *Proiectile de piatră din castrul roman de la Arcobadara [Proiectile The stone projectiles from the Roman castra of Arcobadara]*, Revista Bistriței, Editura Accent. p. 9.
- <http://www.slideshare.net/shaimaa93tomas-limesneu>
- <http://www.raybishophistory.co.uk/german-frontier-of-the-roman-empire/a-landscape-of-history-and-romance/overview-of-the-limes-second-century-ad-2/>
- https://en.wikipedia.org/wiki/Wikipedia:WikiProject_Dacia/Limes_Dacicus

Submitted:
May 23, 2016

Revised:
August 10, 2016

Accepted and published online
December 14, 2016