

Landscape and Getic populations in the upper course of the Botna river

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În rândurile ce urmează, ne vom referi la două fortificații getice cărora le-am acordat mai multă atenție în ultimii ani. Este vorba de cetățuile getice intrate în circuitul științific cu numele de Horodca Mare și Horodca Mică, amplasate în zona Codrilor din centrul Republicii Moldova. Am considerat necesar să orientăm studiile noastre privind fortificațiile din preajma satului Horodca în direcția abordărilor multidisciplinare, în special, în direcția intercalării studiilor arheologice cu cele geografice. În acest sens, vom aborda respectivele situri în contextul relațiilor pe care le-au dezvoltat comunitățile getice din zona cursului superior al râului Botna cu mediul ambiant. Pentru aceasta, în etapa actuală, ne propunem să oferim un tablou general al peisajului în care sunt amplasate aceste situri, desprinzând câteva aspecte care pot fi accesibile la momentul actual: relieful, solurile, vegetația și apele. Respectiv, vom prezenta fortificațiile amintite mai sus în contextul condițiilor geografice, dar vom urmări și corelația lor în raport cu alte situri sincrone cunoscute în spațiile limitrofe.

We will refer next to two Getic fortifications that we paid more attention in recent years. The discussion will focus on the fortifications that are known in the academia as Horodca Mare and Horodca Mică, which are situated in the Codri area in central Moldova (fig. 1). Over several years, my colleagues and I conducted systematic research on these sites, many of the results are already published (Munteanu 2007, 295-310; Munteanu, Iarmulski 2007, 279-286; Munteanu et al. 2009, 61-80; Munteanu et al. 2010, 179-198; Munteanu, Perju 2010, 520-531; Munteanu 2012a; Munteanu 2013a, 311-329; Munteanu, Iarmulski 2013a, 104-106; Munteanu 2013b; Munteanu, Iarmulski 2013b; Munteanu, Tentiuc 2014a; Munteanu,

Tentiuc 2014b, 145-165). Although they provide a range of important information for understanding the phenomena that took place in the second half of the first millennium BC, the predominant use of traditional methods leave considerable reserves in our knowledge. The situation becomes clearer, in particular when compared with the results brought by interdisciplinary studies. We would like to insist especially on issues of past communities relationships with the environment. Understanding the characteristics of the landscape in which an archaeological site is located, climatic conditions and soil characteristics of the area, vegetation and water resources that are specific to the region etc., can highlight the extent and nature



Fig. 1. Map of the Republic of Moldova indicating the Horodca village location.

Fig. 1. Harta Republicii Moldova cu amplasarea localității Horodca.

of discoveries, the functional organization of space arranged in the past or establish issues that caused the community to settle in that place or to leave, or many other realities that today remain outside observations (Ștefan, Ștefan, Cavruc 2012, 14). In these circumstances, we consider that it is necessary to focus our studies on the fortifications around the

village Horodca towards multidisciplinary approaches, particularly towards the intercalation of archaeological with geographical studies. First, it is necessary to draw attention to the extremely low experience that we have in the area of spatial archeology, which surely will leave a visible trace on the generalized character of our study, but we hope this to mark a beginning developed into a continuity related to existing experiences in contemporary academia. Therefore, at this stage, we aim to provide an overview of the landscape in which these sites are situated, detach several aspects that may be accessible at the moment – topography, soils, vegetation and water. Accordingly, we will present the fortifications mentioned above in the context of geographical conditions, but we will also pursue their correlation with other known synchronous sites from adjacent spaces.

To this end, we will begin with providing a brief picture of geo-climatic conditions that characterize this micro-zone¹, by delimitation of geographical space peculiarities in which these sites are located and by specifying the exact location of the two mentioned fortifications and also other known Getic sites so as to delineate further potential connections.

¹ The presented geo-climatic conditions of the micro zone are based on the studies performed by Ion Danilescu, drawn in the PhD thesis *Studiu landsaftic al părții centrale și sud-estice din Republica Moldova*, defended at the Iasi University, „A. I. Cuza” (1999), Faculty of Geology and Geography (manuscript). On this occasion we express our deep gratitude for having been given the opportunity to rely on and use his works.

The landscape: general characteristics

Speaking broadly from the territorial point of view, we will focus our attention on the central forested region Codri in Republic of Moldova, and if we narrow the optics then we will refer to the upper valley of Botna River on the micro-zone in which are located the fortifications Horodca Mare and Horodca Mică (fig. 2). The Codri Region is located in the central part of Moldova (fig. 3) and is the highest in the space between Prut and Dniester with the absolute height of 429.5 m recorded near Bălănești village. It is a rather hilly relief with a fragmentation depth ranging from 300 m to 100-150 m, in most landscapes being 200-350 m. The region is fragmented by valleys of rivers Cula, Ichel, Bâc, Botna and Cogâlnic, but also by other smaller ones that flow into the Prut River (fig. 4). River valleys are well delimited and deep. In general, the right side slopes are steep and affected by landslides, and the left side slopes are gentler and more developed, affected to a much lesser extent of erosion and landslides. The region covers an area of 6625.1 km² and is the exponent of the easternmost European Central Province. Evidence in this regard is the presence of beech trees (*Fagus sylvaticam* fig. 5A), which reaches its extreme eastern limit in the European space, and the presence of brown and brown podzolic soils.

Both evidences are explained by continental moderate temperate climate. It is to mention that this bio-pedologic-climatic complex is observed in the upper Codri forest area only and that it develops transitional characteristics to the Eastern European continental complex, supported by the evidence that at this altitude

(over 350-400 m) the rainfall average rarely exceeds 500-550 mm and the temperature is maintained at 8-9° C. However, on peripheral slopes of this massif, in its middle and lower floors (between 350-200 m), the

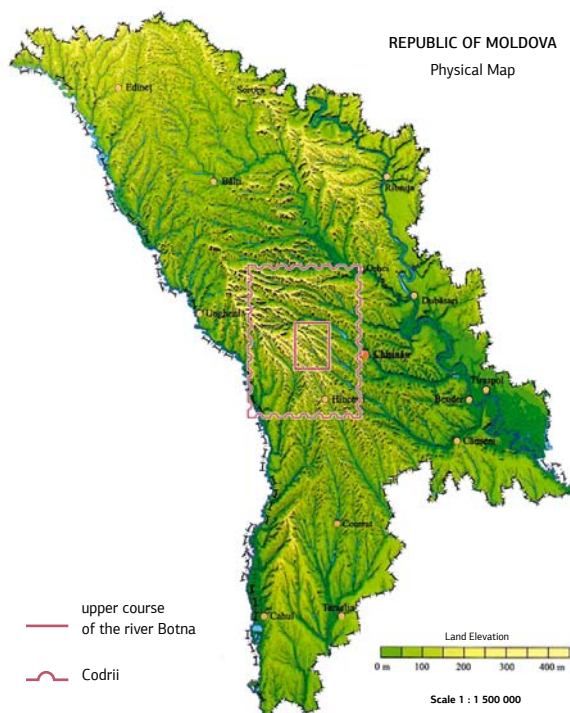


Fig. 2. Map indicating the location of the Moldavian Codri and the upper stream of the river Botna.

Fig. 2. Harta Republicii Moldova cu localizarea Codrilor și cursului superior al râului Botna.



Fig. 3. The central part of the Republic of Moldova – Codrii. Orthophotomap (by <http://geoportal.md/>)

Fig. 3. Ortofotoplan cu partea Centrală a Republicii Moldova – Codrii (după <http://geoportal.md/>)

climate becomes more continental, forest and grass vegetation enriches increasingly with xerothermic elements (oak, fig. 5B), while zonal soils pass from brown-gray to typical gray, even chernozems at the foot of the forest area. The Cordi, which once earned its name due to the large and compact forest landscape, today preserves it's name only because of the remaining “hat” of the forest area. However the name survived so far, both in the popular and scientific language. Today, the landscape has changed, becoming more anthropic to the foot of the forest area. The cause lies in increasing desertification of the natural environment nowadays, which penetrates inside the Codri area which is especially done through enhancing anthropogenic

deforestation and grubbing activities in favor of enlargement for agriculture which is practiced often irrationally and with serious consequences triggering erosion and landslide processes.

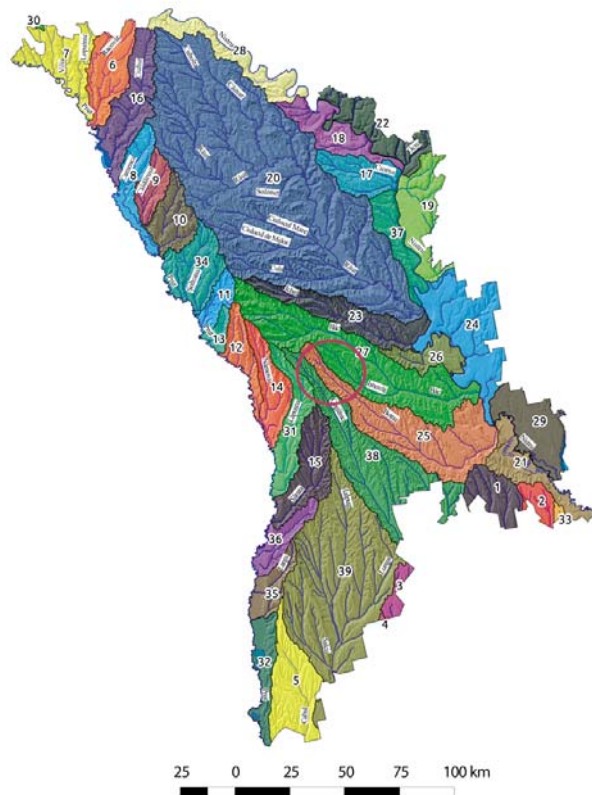


Fig. 4. Moldova: locating the upper river basins of Botna.

Fig. 4. Republica Moldova: bazinele râurilor cu localizarea cursului superior al Botnei.



Fig. 5. Types of forests in the Codri: A - beech forests; B - oak forests.

Fig. 5. Tipuri de păduri din zona Codrii: A - păduri de fag; B - păduri de stejar.

Relief, vegetation, soils and waters in the central part of Codri

In the middle of the forest area we are interested directly in, the relief is oriented from northwest to southeast, where the altitude decreases from 350 to 250 m. The average altitude of watersheds is 300-150 m with a density of fragmentation of 3-4 km/km² in the northern part, 2-3 km/km² in the central part and 1-2 km/km² in the south-western extremity. The slopes structure is mainly made of deluvial deposits with landslides of old layers in the northern and central parts and deluvial deposits in the south. The sum of temperatures above 0° C is 3600, totaling 272 days per year, except Bălănești landscape which totalizes 3500° C or 270 days. The average temperature in July is +21° C and in January -3,5° C, with precipitations reaching 400 mm in the north and 350 mm in the south in the warm

period, and about 100 mm in the cold period. Solar radiation is 86 kcal/cm² in the warm period and 28 kcal/cm² in the cold period. Evapotranspiration is 700 mm in the north and 750 mm in the south.

These conditions gave the space a rich forest vegetation represented by deciduous forests of central European type occupying an area of approximately 16% of the territory. Representative for the vegetation of Codri is the beech (*Fagus silvatica*), holm oak (*Quercus petraea*) and common oak (*Quercus robur*). The common oak is dominant towards the lower peripheries of Codri at the altitude of under 200-220 m. The holm oak, often in association with the hornbeam (*Carpinus betulus*), grows on the tops and slopes with medium or high altitudes of 200-300 m and at altitudes of 350-400 m on slopes with south-west orientation. The beech lives mostly on larger hypsometric levels of 280-400 m.

The companion trees are: the ash (*Fraxinus excelsior*), silver lime (*Tilia tomentosa*), sycamore maple (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*), sweet cherry (*Prunus avium*), and field elm (*Ulmus carpinifolia*). In the lower floors of these forests develop: the wild service tree (*Sorbus torminalis*), field maple (*Acer campestre*), European wild pear (*Pirus piraster*), European crab apple (*Malus silvestris*). Floristic composition and structure of the undergrowth depend on the degree of canopy closure. Among the undergrowth species, a higher frequency present: European cornel (*Cornus mas*), common hazel (*Corylus avellana*), common hawthorn (*Crataegus curvisepala*, *C. monogyna*), common spindle (*Euonymus europaea*), euonymus verrucosa (*Euonymus verrucosa*), common dogwood (*Cornus sanguinea*), wayfarer (*Viburnum lantana*) etc.

This region is characterized by considerable areas of forest soils with mainly two types – brown and gray forest soils and chernozem podzolic and leachate soils. Brown and gray forest soils (more than 40% of the area) are under forests of beech, oak and hornbeam, ash and oak in the highest part of Codri at altitudes typically between 200 and 350 m. Most light gray soils correspond to lithological substrates with light texture and dark gray and gray soils – to those with loam clay and humus texture. The humus content is more frequently between 2.5-3% and respectively 3-4%, decreasing gradually to the foot of the forest area. In the arable soil horizon gray medium humus content varies from 1.9% to 3.6%. Humus reserves in 1 m profile are between 120 and 320 t/ha. Chernozem podzolic and leachate soils (30%) are located usually in forests of oak, hornbeam-oak and hornbeam-oak-

ash in the lower parts of the forest below altitudes of 200-250 m. Podzolic chernozems (strong leachates) is a subtype of transition between gray forest soils and chernozems leachate, located approximately at 200-260 m of altitude. The profile and their properties do not differ much from those of the leachate soils, but the humus content is lower (about 3%), the reaction is more acidic (pH 6.0 to 6.4) and the degree of base saturation is lower (below 75%). Leachate chernozems (cambic and argillic soils) occupy interfluvial ridges and plateaus of the highest hill plains, their less inclined slopes and upper terrace bridges with an absolute altitude of 180-250 m. These are the most fertile soils, with a thickness exceeding a meter and a blackish color due to appreciable content of humus (4 to 5.5%). Their reaction is slightly acidic (pH 6.4 to 6.8) with and a high supply of basic elements and nutrients. Typical chernozems are generally extended on hilly and steppe plains, on gentle slopes of valleys and their middle terraces, generally at absolute altitudes of 150-200 m. The amount of humus is high (5-6%), the reaction is neutral (pH 6.8-7.1), the degree of base saturation is high (85-95%), they have a good supply of nutrients and an intense biological activity, properties which, along with predominantly loamy texture, ensures a high level of fertility potential. These soils are genetically related to the Central European climate and forest vegetation which was almost compact in the past.

The investigated micro-region is fragmented by Botna River, which flows from the southern slopes of the central part of Codri Plateau at 4 km southwest of Lozova village, near the village of Horodca Nouă, having a total length of 152 km. Downstream, up to Sălcuța

village, the river flows in the southeastern direction in a relatively symmetrical valley, but from Sălcuța it flows to the east-northeast. The catchment area is 1540 km². Floodplains is generally 0.5-1.0 km and only in the lower part it is 2.0-2.5 km, sloughing on some segments. On the upper course, Botna is much narrower, but forms a well defined valley with many streams flowing from the slopes into Botna. This particular area was chosen by a number of Getic communities, which they used and protected by the two fortifications around Horodca Nouă village. Therefore, in our focus falls the upper course of Botna River, from its springs up to Ruseștii Noi village.

The fortifications of the upper Botna River

The existence of fortifications in the upper Botna River course micro-zone was reported back in the initial phase of extensive surveys conducted on the territory of Moldova in the immediate post-war period (see localization in fig. 1, 6, 18). Short descriptions of these sites can be found in several publications, however no extensive investigation was conducted in the past (Смирнов 1949, 198-199; Пасек 1949, 59; Златковская, Полевой 1969, 50; Лапушнян, Никулицэ, Романовская 1974, 49, Hâncu 1993, 70). Since 2006 systematic research at this site was initiated and expanded the poor investigation of the micro-zone, also the space which generally stretches toward Prut and the relatively good preservation of the sites from Horodca Mică (promontory is called by Horodca villagers “La Hultan”). Later, the investigations were extended on the surrounding headland, known among local inhabitants as “La Cetate” and among researches as Horodca Mare

(Munteanu 2009; Munteanu 2010; Munteanu 2011; Munteanu 2012b).

Horodca Mică fortification is located on the penultimate Botna River terrace (on the right bank of the river, altitude 269 m), in the close vicinity to its sources, on a promontory bordered by two ravines at about 700 m southwest of the last row of houses on the eastern alignment of Horodca Nouă village (Hîncești District) (fig. 6, 7). Another landmark is the hamlet La Roman, against which the headland is situated on the north-east at a distance of 450 m. The sheepfold is the nearest construction to this promontory which is at a distance of 270 m in the northeastern direction. The headland is shaped like a triangle with cut off corners,



Fig. 6. Fortifications location Horodca Mare and Horodca Mică. Orthophotomap. View from the west (by Google Earth PRO).

Fig. 6. Ortofotoplan cu amplasarea fortificațiilor Horodca Mare și Horodca Mică. Vedere dinspre vest (după Google Earht PRO).



Fig. 7. View of the fortifications Horodca Mare and Horodca Mică. View from the South.

Fig. 7. Vedere asupra fortificațiilor Horodca Mare și Horodca Mică. Vedere dinspre sud.



Fig. 8. The location fortification Horodca Mică. Orthophotomap (by <http://geoportal.md/>).

Fig. 8. Ortofotoplan cu amplasarea fortificației Horodca Mică (după <http://geoportal.md/>).

covering an area of about 1.6 ha (fig. 8). The ravine is very deep and steep on the west, while the slopes get more gentle in the north and northeast, however remaining hardly accessible. The access ways go though the south-west, south and southeast directions with reinforcements made by the inhabitants of the area.

The fortification consists of several defensive elements: wall with adjacent ditch, scarp and bastion. Given the specific topographical space, the southwestern limit of the headland has been chamfered on a length of about 50 m which, of course, facilitated the effort to strengthen the headland area. The remaining space occupied by the connecting area was fortified with wall and ditch (fig. 9 A, B). The wall was raised in the south and south-east of the headland and represents two broken segments, placed at an angle of about 160 degrees with the outside quite rounded and an overall semicircular character (fig. 10). The fortified segment length in the south is 65 m inside and 75 m outside. The difference is explained by the curvature of the defense system. The southeastern segment length is 45 m both outside and inside. The proportionality of lengths is due to the straight character of this fortified portion. The wave width is relatively homogeneous in the west and is 32-33 m long, widening slightly at the junction with the “bastion” up to 35 m (fig. 11, 12). The southeast segment is slightly narrower. Its width varies from 25 m (in the east) to 30 m. In this case, it is probable that the difference in length is due to the curvature of the defense segment. The height of the wall varies between 5 and 6.5 m (from the top of the wave to the footstep level of the precinct). The adjacent ditch width is mainly 12-13 m. In some areas it becomes wider while in others it shrinks. Thus, the ditch narrows



A



B

Fig. 9. Horodca Mică. View of the defensive system, from its inner area: A - South-East; B - the southern part.

Fig. 9. Horodca Mică. Vedere asupra sistemului defensiv dinspre incintă: A - partea sud-estică; B - partea sudică.

to 10 m in the western part near the bastion and, on contrary, widens to 15 m in the opposite side. At present, the difference in level between the top of the wall and the wedge of the ditch is 5.2 m.

The space between the two cut defensive segments has a width of between 10 and 13 m. It is likely that here was located the entry into the fortress, however additional information is required to confirm this assumption. In the south-east part of the gap (entry) raises a “bastion”, which basically makes junction with the western portion of the wall. The certainty of this junction is easily compromised by a “gateway” site that can be appreciated visually as one made in the contemporary period using modern technique. However, this visual statement requires additional field specifications. The bastion currently represents a circular mound which has a height of over 9 m from the



Fig. 10. Horodca Mică. View of curvature of the outer defense system.

Fig. 10. Horodca Mică. Vedere asupra curburii sistemului defensiv din exterior.



Fig. 11. Horodca Mică.
View of the defensive system
from the site.

Fig. 11. Horodca Mică.
Vedere asupra sistemului defensiv
dinspre incintă.



Fig. 12. Horodca Mică.
View of the defensive system
from the extra-muros.

Fig. 12. Horodca Mică.
Vedere asupra sistemului defensiv
dinspre zona extra-muros.

present footstep level (fig. 13). The “bastion” diameter is about 16.5 m. There is a ditch on the outside of the bastion which makes a direct connection in the west with the adjacent ditch of the western segment of the fortification. The Ditch width is smaller than that of the wall and is 6 m in the west and 9 m in the east.

The fortification of Horodca Mare is situated at the distance of about 300 m northwest from Horodca Mică fortification (on the right bank of the river, altitude 260 m; fig. 6, 7). It is separated from the later by a deep ravine whose slopes form the promontories *La Hultan* (on which Horodca Mică fortress is located) and *La Cetate* were discovered remains of Horodca Mare fortification. The headland *La Cetate* is bordered by the already mentioned ravine and another one located slightly toward north-west. Both ravines are sufficiently deep with steep slopes, especially in the north and east (fig. 6, 7, 14). The promontory itself is quite large, occupying an area of about 32 ha with the site holding a surface of about 8 ha in its northeast part (fig. 15). The precise area of the site can hardly be defined at present because of destructions to the defensive system during the collectivization period, when intra-mural territories were part of farming land. In order to facilitate access to this land, the wall of the defense system was overturned into the ditch, so that today no trace of it can be seen with a naked eye. However, their existence was mentioned by our forefathers in the immediate post-war period (without pointing it's exact location) when these sites were mapped, also they are preserved in the memories of the elder villagers (discussion with an old man who mentioned relief forms at Horodca Mare fortification similar to those from the space of



Fig. 13. Horodca Mică. View of the bastion from the extra-muros.

Fig. 13. Horodca Mică. Vedere asupra bastionului dinspre zona extra-muros.



Fig. 14. Horodca Mică. View of the headland from the North-East.

Fig. 14. Horodca Mare. Vedere asupra promontoriului dinspre nord-est.



Fig. 15. Horodca Mare. View of the headland from the North-East, indicating the site's location. Orthophotomap (by Google Earht PRO).

Fig. 15. Horodca Mare. Vedere asupra promontoriului dinspre nord-est cu localizarea sitului (după Google Earht PRO).



Fig. 16. Horodca Mare. Location of the potential defensive systems. Orthophotomap (by Google Earht PRO).

Fig. 16. Horodca Mare. Ortofotoplan. Localizarea posibilelor sisteme defensive (după Google Earht PRO).

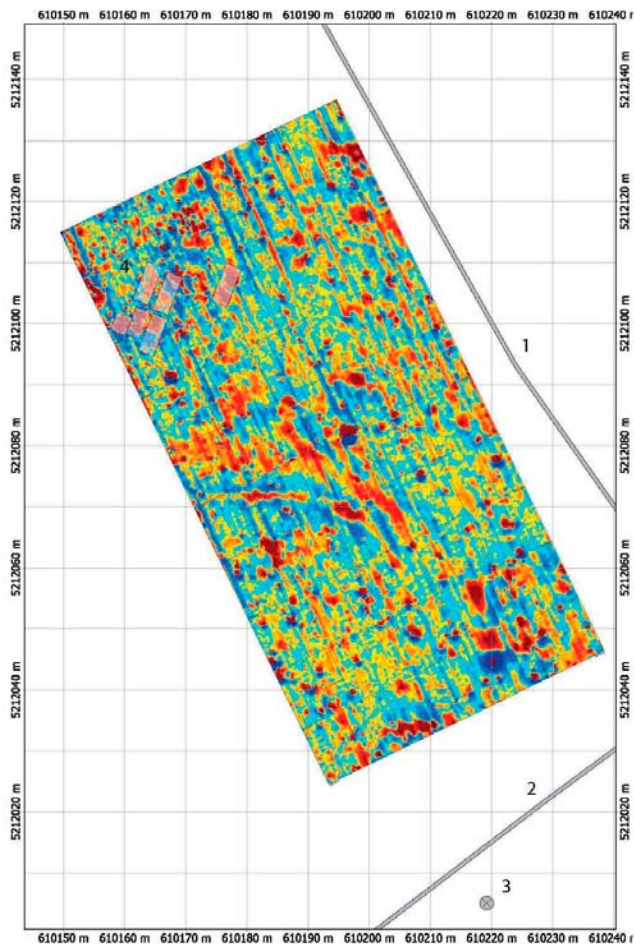


Fig. 17. Horodca Mare. Magnetometric plan of investigated surface.

Fig. 17. Horodca Mare. Planul magnetometric al suprafeței investigate.

Horodca Mică fortification which are better preserved). This information may be supplemented by data drawn from the analysis of satellite images (fig. 16) and geo-magnetic prospecting carried inside the fortification (fig. 17; Popa et al. 2010, 146, planșa 1). And if the defensive line that was meant to bar the access to intra-mural fortification did not preserve, luckily the defensive elements from the perimeter of steep banks of the fortification are still visible today. It is true that their current size is relatively small and does not allow a clear view, nevertheless traces can be observed from a closer examination of the territories in the north-eastern and northern edge of the promontory (fig. 18). Moreover, these spaces have been studied through field research and a fairly clear picture was obtained about the fortification structure. What deserves attention is that the rather steep slope has not been considered sufficient to provide defensive certainties only by a palisade, therefore it was resorted to digging a trench adjacent the palisades, which is located just up the hill. The Intramural area is mostly covered with vines, which does not allow field research and cannot offer a clear picture of the habitation degree. However, the harvested material from the surface together with field research in the few gaps of vines, allows us to advance the idea of including this territory into the hearth of the communities that built it (Munteanu 2009; Munteanu 2010; Munteanu 2011; Munteanu 2012b).

Thus, making a balance of mentioned above facts the following picture emerges. In the area immediately surrounding Botna River springs, the inhabitants from Iron Age II conducted actions that require serious physical, intellectual, and material effort in order to

fortify two spaces placed at relatively short distance from each other (fig. 6, 7, 19). Both sites offer perfect vision over the valley of Botna and open a wide corridor of movement in areas of hills covered with forests (fig. 20, 21). Moreover, there is a perfect view from each fortress over the other one providing opportunities for communication and coordination of actions of the defenders of these fortifications (fig. 22, 23). It is to mention that at the base of Horodca Mare fortification were discovered traces of a synchronous settlement occupying an estimated area of about 4 ha which cannot be studied at the moment because of the plantations of plum trees (a situation which generally compromises the conservation status of the site, fig. 19).

Getic settlements in the upper course of the Botna River

We would like to mention a number of archaeological monuments dated with La Tene period and located around the two mentioned sites (fig. 24). Only in the micro-zone of Horodca village other four Getic sites were identified. One was reported in the western entry to the village Horodca on the right side of a tributary of Botna (Horodca VI, fig. 24/4: Полевой 1969, 193; Лапушнян, Никулицэ, Романовская 1974, 58). A second can be assumed in the central part of the village where sporadic traces of Getic remains were reported, while at the eastern entrance into the village were identified Getic remains that allow assuming the presence of another point (the findings were noted by the author of this work during the last years campaigns – fig. 24/5, 6). Not far to the east, at a distance of about 900 m,



Fig. 19. Orthophotomap (by Google Earth PRO) indicating the location of the fortifications Horodca Mare, Horodca Mică and settlement Horodca. View from the north-east.

Fig. 19. Ortofotoplan cu amplasarea fortificațiilor Horodca Mare, Horodca Mică și a așezării deschise. Vedere dinspre nord-est. (după Google Earth PRO).



Fig. 18. Horodca Mare. View of the defensive system from the north-eastern part of the promontory.

Fig. 18. Horodca Mare. Vedere asupra sistemului defensiv de pe marginea nord-estică a promontoriului.



Fig. 20. View of the Botna river valley from the promontory *The Citadel* (Horodca Mare).

Fig. 20. Vedere asupra văii râului Botna de pe promontoriul *La Cetate* (Horodca Mare).



Fig. 21. View of the Botna river valley from the promontory *At Hultan* (Horodca Mică).

Fig. 21. Vedere asupra văii râului Botna de pe promontoriul *La Hultan* (Horodca Mică).

was located another Getic settlement (Ulmu III, fig. 24/7: Романовская 1969, 81-95; Romanovskaja 1987, 207-226). Moving eastward from the nest of Getic settlements around Horodca village we will reach other three settlements situated on the estate of Ulmu village. The nearest site from the last one of Horodca is at the distance of about 1 km right at the north-western limit of the village Ulmu (Ulmu IV, fig. 24/8: Полевой 1969, 195; Лапушнян, Никулицэ, Романовская 1974, 57). On the opposite side of the village (east side) were identified two other Getic settlements: one on the right bank of Botna and another on the left bank. The settlement on the right bank is closer to the settlement in the western part of the village and is located at a distance of about 2.5 km from it (Ulmu VII, fig. 24/9: Полевой 1969, 198; Лапушнян, Никулицэ, Романовская 1974, 57). The settlement on the left bank of Botna is situated at a distance of about 900 m southwest off the settlement on the right bank (Ulmu V, fig. 24/10: Полевой 1969, 195; Бырня 1974, 99). Around the village Vasieni were recorded other two settlements: in the west, at a distance of 2.5 km from the south-eastern site of Ulmu, is located a settlement (Văsieni II, fig. 24/11: Полевой 1969, 198; Дергачев 1973, 94), and, on the opposite side of Vasieni village, at a distance of 4.5 km, there is another Getic site (Văsieni V, fig. 24/12: Полевой 1969, 199). The last in the array of sites from this area of Botna, is a site located at a distance of 1.8 km in the south-eastern direction and closer to the western edge of Ruseștii Noi village (Ruseștii Noi IV, fig. 24/12: Полевой 1969, 139-200; Лапушнян, Никулицэ, Романовская 1974, 60). Thus, along the upper Botna River, starting immediately with the fortification near Horodca Mare, other 11 open settlements were located.

Six of them are situated on the right bank of the river, and five on the left one.

We can notice that the distances between the settlements are not too big, in a way that walks from one to the other did not require much time, thus being assured an easy and continuous communication between the settlements. All the settlements are located nearby Răut River, practically in the River Valley, but in the same time their location surfaces rise slightly above the valley. The location altitude for the settlements from Ruseștii Noi and Văsieni (those situated in the dowside of the microzone) is lower than 115 m. The settlements near Ulmu village are situated at altitudes that are only few below 155 m, but those nearby Horodca village are located at higher levels – approximately 185-188 m. The only settlement situated at a high enough level is one settlement from the foot of the Horodca Mare fortification – approximately 220 m above sea level, thus being only 40 m lower than the *La Cetate* promontory and 40 m higher than the Botna River level at its nearest point.

Near these sites, wide areas of very high quality farming land have been attested, presenting a comfortable exposure and therefore perfect conditions for practicing agriculture. The necessary amount of water can be sufficiently provided by the main water artery of the microzone, as well as the by the multiple streams flowing into the Botna river, this being an additional favourable conditions for practicing land works. To these factors, the surrounding Codri area has to be added, which represents an enormous source of wooden raw material, used in a wide range of activities: from building the living spaces



Fig. 22. View of the promontory *At Hultan* (Horodca Mică) from the promontory *The Citadel* (Horodca Mare).

Fig. 22. Vedere asupra promontoriului *La Hultan* (Horodca Mică) de pe promontoriul *La Cetate* (Horodca Mare).



Fig. 23. View of the promontory *The Citadel* (Horodca Mare) from the promontory *At Hultan* (Horodca Mică).

Fig. 23. Vedere asupra promontoriului *La Cetate* (Horodca Mare) de pe promontoriul *La Hultan* (Horodca Mică).

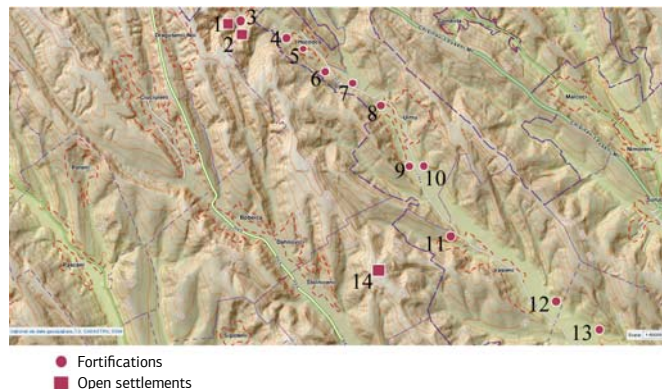


Fig. 24. The micro-zone of the Botna river upper course indicating the site's location (by <http://geoportal.md/>): 1 - Horodca Mare; 2 - Horodca Mică; 3 - aşezarea Horodca; 4 - Horodca VI; 5 - Horodca sat; 6 - Horodca sud; 7 - Ulmu III; 8 - Ulmu IV; 9 - Ulmu VII; 10 - Ulmu V; 11 - Văsieni II; 12 - Văsieni V; 13 - Ruseştii Noi IV; 14 - Stolniceni.

Fig. 24. Microzona cursului superior al râului Botna cu amplasarea siturilor getice (după <http://geoportal.md/>): 1 - Horodca Mare; 2 - Horodca Mică; 3 - Horodca-aşezare; 4 - Horodca VI; 5 - Horodca sat; 6 - Horodca sud; 7 - Ulmu III; 8 - Ulmu IV; 9 - Ulmu VII; 10 - Ulmu V; 11 - Văsieni II; 12 - Văsieni V; 13 - Ruseştii Noi IV; 14 - Stolniceni.

(with all its potential annexes) and the defensive systems to the confection of various daily use artefacts. These being given, the communities settled along upper Botna were provided with sufficient resources for organizing autonomously their daily life. In the same context, we should note that farther, on the other side of Ruseştii Noi, the Botna valley begins to slightly widen, therefore in the microregion formed by the villages from the lower course of the Botna River, the situations appears to be different, being determined by another kind of circumstances and natural conditions, which would be

worthy being treated separately, considering that the big number of opened settlements are gravitating around other fortifications than those discussed above, such as those from Pojăreni, Hansca and Sociteni.

As a final thought, I would like to draw the attention to the Stolniceni site – its particularities classify it among those having a deep spiritual signification and, considering its location, it can be regarded as a sacred place, common for a number of more Getic groups from the upper Botna region. Although this situation requires additional research and specifications, their framework rising beyond the purposes set for this work.

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