TRENDS AND PROSPECTS IN THE EVOLUTION AND DYNAMICS OF THE FELIX - 1 MAI SPAS TOURIST SYSTEM

Grigore Vasile HERMAN*
University of Oradea, Department of Geography, Tourism and Territorial Planning,
University St., 410087, Oradea, Romania, e-mail: grigoreherman@yahoo.com

Corina TĂTAR
University of Oradea, Department of Geography, Tourism and Territorial Planning,
University St., 410087, Oradea, Romania, e-mail: corina_criste_78@yahoo.com

Abstract: The unprecedented expansion and unbalanced development of the system components Băile Felix - 1 Mai, recommends and calls for the identification of development directions and prospects as an essential prerequisite. This is also claimed by the context of sustainable and responsible development through tourism of the territorially analyzed system.

Key words: tourist system, statistical analysis, trends, prospects, spa

INTRODUCTION

The Băile Felix - 1 Mai tourist system includes all objects, processes and facts related to the tourist activity of Băile Felix, 1 Mai-Haieu, Sanmartin, Cordau and Rontau within its structure. The first forms of tourism in this area appeared in the localities 1 Mai and Felix. Over time they evolved to the current state of tourism resorts, one of national interest (Băile Felix), and the other of local interest (1 Mai). So around these tourist resorts a very complex and dynamic phenomenon has crystallized itself. The complexity of the tourism phenomenon is given, on the one hand, by the structural association in time and space, and on the other hand by the relationships that were established between its components. The dynamics of tourism activities is well evidenced both at a temporal scale, developing over temporal and spatial scales, the outpouring of tourism activities outside the two core cities (Băile Felix - 1 Mai) to the localities of Rontau and Sanmartin.

Located in the central part of Bihor County, on the left bank of Crisul Repede River, at the contact between the hills of Lazareni with the Crișul Vad Corridor - Oradea on the European road axis 576, this area is characterized by certain specific features which reflect in the geological orographic climatological hydrographical bio-geographic pattern and indirectly in the functionality and efficiency of tourism developed in this area (figure 1).

From an administrative viewpoint the tourist system Băile Felix - 1 Mai is part of Oradea Metropolitan Area by enclosing Sânmartin alongside the communes of Biharia, Cetariu, Bors, Paleu, Oșorhei, Girișu of Criș, Sântandrei, Nojorid and Oradea municipality to this territorial entity

* Corresponding author
Sanmartin commune consists of the following towns: Băile Felix, Cihei, Betfia, Cordău, Rontău and Haieu.

For space-related literature the tourism system Băile Felix - Băile 1, is not new, being approached in various ways such as: biology (Tuszon, 1908; Borza, 1917, 1924; Bănărescu, 1969; 1981; Bănărescu et al., 1960; Marossy, 1974; Olteanu, 1977; Gavriloaie et al., 2010; Herman, 2011), geography (Măhăra, 1970; Țenu 1975, 1981; Posea, 1997), tourism (Munteanu și Grigore, 1975; Munteanu et al., 1979; Munteanu et al., 1987; Ilieș și Josan, 2009; Ilieș et al., 2011; Baias et al., 2010; Ilieș et al., 2013), ecology (Șoldea, 1997, 1998, 2003) etc.

The optimal conditions offered by the natural milieu, strategic position close to the Municipality of Oradea and the Romanian-Hungarian bordeland, thermal mineral resources available in this area, the secular tradition in their exploitation etc. favored here the outcrop since its early stages a type of incipient spa tourism.

**METHODOLOGY**

The identification of evolutionary directions and perspectives and the dynamics of the system Băile Felix - 1 Mai is based on two key pillars. The first pillar refers to capturing the current state of the analyzed system and explaining its operating mechanisms and networking. In this respect, a brief radiograph was carried out of the studied area by reviewing and causal explanation of each subcomponent (subsystem), the two major components of the environment, namely: the natural (lithology, relief, hydrography, climate, vegetation, fauna) and the anthropogenic (tourism infrastructure).

The second pillar relates to the identification of deviations and trends of development of the tourist system. This task is particularly difficult as we might ask ourselves what do we mean by
deviation? or What are deviations? Although in theory the answer is simple "the difference between the actual or permissible limit value of a measurement unit and its nominal value" (Dex, 2009), faced with it, researchers may encounter some difficulties, which we can be overcome only through hard work, experience and perseverance. Overlooking these considerations, one thing is certain, deviations can be two fold: positive or negative.

Taking an overview of the system Băile Felix - 1 Mai and knowing its trends, based on the identifying and definition of irregularities, we could pass to the next step, namely the formulation of recommendations and measures required to be taken. Depending on the degree of their achievement they have made several scenarios on the prospects of development of the analyzed system.

This study concludes by highlighting several significant conclusions. Its achievement aims to pull a warning signal, to invite decision makers to reflection and not to solve a problem faced by the local Romanian tourism. By the logical sequence of arguments the study offers suggestions, some solutions, but it is for the decision makers to weigh them and put them in practice as such.

**CURRENT STATUS OF THE BĂILE FELIX - BĂILE 1 MAI TOURIST COMPLEX**

In terms of lithology, the area Felix - 1 Mai is characterized by Mesozoic sedimentary rocks (limestone and dolomite) over which tertiary and quaternary sediments are laid, all deposited over a crystalline foundation. Over the crystalline formations are disposed transgressive Triassic sedimentary formations, represented by conglomerates, sandstones, quartzite, shale loamy, dolomite and limestone massives, ash. The deposits composed of clay-purplish-red sandstone, gray quartzite sandstone, compact limestone with clay marl slate intercalations and limestone with echinoderms.

Cretaceous is characterized by gray and black limestone deposits and gray sandstones. Lacustrine deposits belong to the Tertiary Age, the Pontian being represented by yellow sands. Following the withdrawal of the Pannonian Lake, the area of the relict species *Melanopsis pareyssi* and *Nymphaea Lotus - termalis* shrank to the area of thermal lakes, while the *Melanopside* species disappeared. Quaternary accounts for fluvial-swampy formations: clays very varied sands (clay, fine, coarse), gravel and boulders (Posea, 1997; Şoldea, 2003).

In terms of orography, the complex tourism system Felix - 1 Mai, Somleu Hill (346 m) stands out, Cordăului hills (270 m) and of Apateu (102 m). They are erosion witnesses of the accumulation piedmont Pădurea Craiului Mountains (of the Pliocene). Another particularly interesting aspect is given by the presence of limestone of Somleu Hill, where a specific karst relief (pit "Hudra Bradii") was formed.

From a climatic perspective, the system Băile Felix - 1 Mai is characterized by a moderate continental plain climate, with mild winters and moderate summers under the influence of Mediterranean elements. Average annual temperatures range around 11,3 ° C and the average annual rainfall is 622.2 mm (Măhăra, 1970).

The ground hydrographic network consists of Peta River and "Peta Lake" – with, Ochiul Țiganului, Ochiul Pompei (whose springs are currently clogged) and Ochiul Mare - located on its course. With a length of 12 km, along which crosses the tourist resort of local interest 1 Mai and part of Oradea, Pețea Brook is a right-side tributary of the Repede River, standing out by the specific thermal waters features. Lake Pețea due to its thermal springs creates optimal living conditions for the subtropical water lily *Nymphaea lotus var. thermalis* and the endemism called "Racovița’s rudd" (Șoldea, 2003).

The deep waters have a thermal character being quartered in the karst limestones which belong to the Lower Cretaceous. Their fuelling occurs along the fault lines of the primary limestone Triassic deposit, by ascension. The location of the Băile Felix - 1 Mai system on a tectonic fallen compartment with deep fractures, provides hot water buoyancy from the depth. In the area of Băile May 1, due to thinner than 50 m Pliocene deposits, thermal waters occurred along the Peta Valley through 17 springs, the most prominent being Ochiul Mare, Ochiul Țiganului și
Ochiul Pompei. Close to the natural thermal springs, a series of drills aimed felling with water the treatment basis of man-made pools (Țenu, 1975; Șoldea, 2003).

In terms of soil, Pliocene soils are characteristic for this area, poorly evolved and differentiated, respectively iluvial clay-brown soils and clay-iluvial chernozioms in the lower parts and the higher areas have developed brown soils and white luvisols (Posea, 1997).

The dominant floral associations are represented by tree species such as tall pedunculated oaks (*Quercus robur*), whose age overpasses 200 years and which stand as a proof of the once extended forests which covered this area. Most areas are covered with Turkey oak (*Quercus cerris*), which spreads to Dealul Șomleu Hill, on its northern slope also beech (*Fagus silvatica*) along with common oak (*Quercus petraea*), followed in terms of spread by hornbeam (*Carpinus betulus*), elm tree (*Ulmus foliacea*), Turkey oak, gârniţă (*Quercus fainetus*), ash tree (*Fraxinus excelsior*), linden tree (*Tilia tomentosa*), and wild cherry (*Cerasius avium*). The shrub is well represented by sânger (*Cornus sanguinea*), lily (*Siringa v*), hip rose (*Rosa canina*), hazelnut tree (*Corylus avellana*), privet (*Ligustrum vulgare*) etc. (Marossy, 1976; Herman, 2011).

In terms of vegetation, a Tertiary-aged element appears namely the water lily (*Nymphaea lotus var. thermalis*), which has survived the Quaternary glaciation (Borza 1917, 1924; Tuszon, 1908). This was possible due to the thermal water of Lake Peta, whose temperature varies between 31ºC in summer and 21ºC in winter, thus ensuring optimum vegetation conditions for the growth of this tropical species.

The fauna is represented by mammals: hare, fox, deer, field mouse, gopher, hamster and birds: sparrow hawk, starling, skylark, cuckoo, hoopoe, woodpecker, sparrow etc. A key attraction of fauna Băile May 1, is the squirrels A key fauna attraction of Băile May 1 are squirrel (*Sciurus vulgaris*), which can often be glimpsed through the branches and bent branches of the oaks that populate the reserve but also in the nearby forest of the resort. Among the most typical insects are grasshoppers, crickets, mantis etc. Batrachians are poorly populated as a species, of which the green toad (*Bufo viridis*) stands out, lizzards (*Lacerta agilis*) and the grass snake (*Natrix n.*). Peta waters, and particularly lacustrine formations along the valley shelter the tropical species of snail *Melanopsis parreysii*, and an endemic species of fish - rudd - (*Scardinius erythrophthalmus racovitzai*) adapted at 28 º - 34 ºC temperature of the thermal water (Bănescu et al., 1960; Bănescu, 1969; Bănescu, 1981; Marossy, 1974; Olteanu, 1977; Posea, 1997; Florescu, 1966; Șoldea, 2003; Gavrilaoie et al., 2010).

A part of the elements belonging to the natural milieu, formerly analyzed, due to their exceptionally defining peculiarities have become natural tourist resources. Among them we can refer to the thermal water, pit of Befția, natural reserve "Pârâul Peța", fossile site Dealul Șomleu and the lime pit of Dealul Șomleului.

**ANTHROPOGENIC MILIEU**

Spatio-temporal events’ evolution of the local community has led to anthropogenic tourism resources among which the architectural historical and ethnographic heritage of the area. Its strategic position (in the proximity of Oradea municipality, at the contact of the Western Hills and the Western Plain), the existence of tourism resources (mentioned above) were the primary factors in the development of tourism infrastructure as well as the ancillary one.

The accommodation facilities lie at the core of the material basis on which the unfolding of all tourist activities depends. Accommodation forms have evolved over time, from the basic rest and treatment houses to guest houses, lodges, campsites and nowadays hotels. Thus, the tourist system Băile Felix - 1 Mai has a number of 178 accommodation units hierarchically arranged in percentage on localities as follows: Băile Felix (50,6 %), Sânmartin (23,8 %), Băile 1 Mai - Haieu (23,2 %), Cordău (1,8 %) și Rontău (1 %) (LSPTC, 2015).

The statistical analysis of the rooms (from the accommodation units) within the five localities falling within the Băile Felix-1 Mai tourist system structure reveals the predominant weight of Felix Spa (73,9%), followed by Băile 1 Mai - Haieu (15%), Sânmartin (8,6%), Cordău (1,7%) și Rontău...
(0,3%) (figure 2). A similar situation can also be observed in terms of the percentage of beds, namely: Băile Felix (72,2%), followed by Băile 1 Mai - Haieu (15,9%), Sânmartin (8,8%), Cordău (2,7%) și Rontău (0,4%) (LSPTC, 2015).

![Figure 2](image1.png)

**Figure 2.** Structure (%) of the accommodation units within the tourist system Băile Felix - Băile 1 Mai Spa  
(Source: LSPTC, 2015)

![Figure 3](image2.png)

**Figure 3.** Structure (%) of rooms within the Băile Felix - Băile 1 Mai Spas tourist system  
(Source: LSPTC, 2015)

![Figure 4](image3.png)

**Figure 4.** Structure (%) of beds within the Băile Felix - Băile 1 Mai Spas tourist system  
(Source: LSPTC, 2015)

With a total number of 9794 seats (49% of the total number of seats in the county), restoration/ catering is structured in 66 public catering establishments classified with 1 star (1
unit), two stars (36 units), three stars (25 units) and four stars (4 units). In terms of spatial distribution their concentration in Băile Felix (42 units), Sanmartin (16 units), 1 Mai-Haieu (7 units), Cordău (1) is remarkable (LSPTAP, 2015).

The treatment infrastructure is well represented in the system Băile Felix - 1 Mai Spas, here are located a number of hotels that have treatment centers where tourists can benefit of the following services: balneotherapy, hydrotherapy, electrotherapy, inhalation, massage, laser therapy, physiotherapy, mechanotherapy, light baths, thermotherapy etc. The hotels providing such services are: Internațional, Crișana, Padiș, Poienița, Someș, Nuțărul din Băile Felix și hotelurile Ceres și Perla din Băile 1 Mai.

The existence of geothermal resources has created optimal conditions for the development of recreational infrastructure in Băile Felix (Apollo Pool, Felix Pool, swimming pool of Padiș and Aqua Park „Aqua President”) and in 1 Mai Spas (Venus swimming pool and swimming pool with waves, currently inoperative).

Conferences and exhibitions ammenities are represented by the existence of 21 units of this type with a capacity of 2085 seats, hierarchically distributed as follows: Băile Felix (15 units) and 1 Mai (5 units), Sanmartin (1 unit).

**IDENTIFICATION OF DEVIATIONS AND EVOLUTIONARY TRENDS**

With a view to identify the deviations and evolutionary trends of the tourist system Felix - 1 Mai spas we took as a case study the evolution in time and space of accommodation units (number of structures, number of rooms, number of beds) and public food catering (number of structures, number of seats) and the problems currently facing the analysed tourist system.

The analysis of the number of accommodation units between 1991 and 2014 shows three major stages of development. The first stage shows a slight upward trend between 1991 - 2004, followed by a period of asserting their maximum development between 2004 - 2007, followed by a period of relative stagnation of the upward trend. As regards the evolution to the public food catering industry, between 1991 - 2014 a relative progress can be noticed similar to the one of the accommodation units, but slower in scope (figure 5).

The analysis of the number of rooms and its related beds shows a relatively similar trend to the number of accommodation units. The relativity of their evolution in relation to the evolution of the number of accommodation is given by the setting into function of two two-starred hotels (Hotel Padiș and Hotel Muncel) with a total of 764 rooms, 1528 beds respectively, which led to positive deviation in 2010, when actually the number of the accommodation rooms and beds increased by 24% (figure 5). In terms of the number of seats in public food catering related to the analyzed Băile Felix - 1 Mai Spas tourist system for the period 1991-2014, we can see about the same anomaly induced by the food-related structures besides the accommodation units of Hotel Muncel and Hotel Padiș, namely Muncel and Padiș restaurant canteens with a number of 1030 two stars registered seats (figure 6).

![Figure 5. Accommodation units’ evolution and public restauration/food catering](Source: LSPTC, 2015; LSPTAP, 2015)
The analysis of the accommodation units’ spatial spread between 1991 - 2014 indicates a relatively similar evolutionary trend of the five examined localities, with slight deviations from one place to another, from one year to another (figure 7).

Based on the analyzed information on the number of the accommodation and public food catering units in the area of the tourist system Felix - 1 Mai for the period 1991-2014 the development trend of accommodation and public food catering sector for the period 2014-2114 (figure 8) was achieved. It was obtained by the extraction of the annual numeric growth rate of the
The development trend of the accommodation and public food catering for the period 2014 - 2114 shows an upward trend, with an annual trend rate of 4.3% (7.8 accommodation units, respectively 2.8 public food catering units). In this evolving regime, the tourist system Felix-1 Mai Spas, in 23 years, by 2037 will double the number of accommodation and public food catering units, while over a century under the circumstances their number may reach 962 for accommodation units, respectively 352 public food catering units. Obviously the question raises: what is the limit of affordability/carrying capacity of the tourist area Bâile Felix - 1 Mai Spas.

Answering this question involves a particularly delicate and complex study which must start from the current reality, from each defining parameter of the analyzed tourist area. The obtained evolutionary simulation is valid only if the annual growth rate remains unchanged for the next century. Obviously, it is a simulation that aims to present some future trends, on which some evolutionary scenarios can be done, regarding the sustainable development of tourist system Felix - 1 Mai Spas. So this evolutionary model is purely theoretical, but it shouldn’t be omitted from future local and regional development strategies of the studied area.

Following the careful analysis of the specialised literature and research conducted in the field, a number of problems facing the tourist system Bâile Felix -1 Mai Spas were spotted, namely: the Natural Reserve "Pârâul Peța" deterioration and lack of leisure-related alternatives; lack of parking; low level of the trained personnel employed in tourism, the poor quality of tourist services, expensive in terms of price - quality; lack of an integrated tourist promotion-capitalization system; decreased water flow and mesothermal waters’ temperature etc. Overcoming these identified problems, and beyond, is a sine-qua-non for the optimal development of the tourist system Felix - 1 Mai spas. In this regard, in the next chapter, we bring to the attention of local authorities and all stakeholders a few recommendations and measures to be taken.

RECOMMENDATIONS AND MEASURES

The deterioration of the Natural Reserve "Pârâul Peța" is one of the thorniest problems facing tourism in Bihor County. Although, over time, Cris Land Museum, as a custodian, has "drawn numerous warning signals of the reserve’s disappearance risk" to the local and central authorities, represented by the town hall of Sanmartin, Bihor County Prefecture, Ministry of the Environment, Environmental Protection Agency of Bihor County, the National Agency for Mineral Resources, Government of Romania etc. They were late in taking measures for various reasons. It was "necessary" that the "Natural Reserve Pârâul Peța disappear" so that public authorities and all stakeholders establish the "catastrophe". On the account of this indifference, a research group funded by Mohamed Bin Zayed, through the project Captive Breeding And Maintaining Ex Situ Populations of Scardinius Racovitzai and Melanopsis Parreyssii succeeded to save from extinction the thermophilic species by the „reproduction in captivity and ex situ conservation of thermal rudd populations (Scardinius Racovitzai, Muller, 1958) and thermal snail (Melanopsis Parreyssii, Philippi, 1847)". The big challenge that public authorities along with civil society have to address now will be the resuscitation, rehabilitation of the natural environment Natural Reserve “Pârâul Peța” to restock it with thermophilic species saved from extinction. From a tourism perspective, this goal is particularly important for the Natural Reserve “Pârâul Peța” as it can motivate and generate tourists flows as well as function as a tourist destination brand.

The lack of alternatives with regard to leisure is another milestone for local tourism, its overcoming relates to the diversification of the tourism supply. A first step could be the creation of a traditional „village museum” of Bihor county, then setting up an integrated network to facilitate cyclotourists’ access to the tourist sites in the vicinity and Oradea Metropolitan Area; rehabilitation of the tourist sites and their capitalization through specific measures; forests’ planning of Felix and 1 Mai spas as spaces of relaxation and leisure through specific works to facilitate the tourist’s access with regard to the latter’s maximum security and respect for nature
etc. All these aspects are meant to retain the tourist as much as possible in the destination, thereby contributing to the increased economic and social performance of tourism. They will have an indirect impact in the growth of tourists’ number, but will meanwhile create more demand for parking spaces. The fight for space is a daily reality that engages tourism too, together with other economic sectors. In the study area the battle is led between tourism entrepreneurs who need space to develop their business and leisure travelers who are not willing to give up the comfort of their vehicle. Overcoming these problems requires a corresponding intelligent management of the parking space. For example, Bâile May 1 spa, since it is not located on a heavy traffic road, the traffic could be restricted to a speed limit of 30 km/h and prohibiting parking. Obviously these measures should be accompanied by others such as building a parking lot at the entrance to the resort, with video surveillance and security, introduction of tourist transportation means to meet tourists' demands.

The low training level of the personnel employed in tourism, the poor quality of tourist services expensive in terms of price-quality are other challenges that the tourist system Felix - 1 Mai spas has to face. Overcoming them is a matter of duration, which holds to the the tourist destination maturity, on the one hand, and on the other hand, to the socio-economic context in which this system is working. The maturity of a tourist destination can translate in the understanding and perception of reality by the main local stakeholders and beyond. The socioeconomic reality is specific to the entire Romanian area, which is in a continuous transition from a communist to a capitalist society, in the shadow of bad management supported by various interest groups. The solution to these problems is education, information and knowledge. The engine of a society based on knowledge is information. The capture of quality information for the "enlightenment" is done through education.

To all the aforementioned problems, we can also underline the lack of a unitary integrated system of tourist promotion and capitalization. From a structural viewpoint, the tourist promotion and capitalisation system should include the following components: tourist maps; notice boards; tourist signage; banners; leaflets; brochures and a unitary integrated website managed by a beneficiary in this scope. Therefore the system thus proposed should be updated regularly (latest information, according to reality in the field) and maintained by a beneficiary.

The accomplishment degree of the identified recommendations and issues which tourism is faced with within the Bâile Felix – Bâile 1 Mai spas tourist system will constitute the premises that will underpin the prospects for the aforementioned tourist system.

**EVOLUTIONARY PROSPECTS**

Regarding the outlook of the tourism system Felix - 1 Mai spas, three evolutionary directions can be shaped namely: I - The evolution follows this trend; II - Evolution stagnates and III - Evolution follows a different trend.

In the case of the scenario "I - The evolution follows this trend" we will witness an excessive development in the number of accommodation and public food catering units without a correlation with the tourist motivating and generating factor (thermal water resources, other alternatives to leisure). Furthermore the tourist units’ building will have a negative impact in the economy of the vital space for unfolding tourist activities. The vital space for the unfolding tourist activities refers to: accommodation units, public food catering units, areas for cure and leisure, relaxing areas for the psychical and physical recovery, other types of spaces (parking lots and adjacent tourist services). As a consequence of this, tourist services will increasingly dilute in qualitative terms, up to determining behavioral changes in terms of potential tourists’ decision to choose this destination.

In the situation of "II – Evolution stagnates" long-term results will be similar to the ones of the first scenario, only the speed and the time required for the system to reach maximum entropy state will differ. To avoid this trend, qualitative changes need to be introduced within the Bâile Felix - 1 Mai spas tourist system which will, at their turn, impress positive mutations to the
analysed system. The qualitative-related changes are the outcome of the formerly proposed measures, which a society in its whole should carry out.

In this case, “III - evolution follows another trend” the life cycle of the tourist system will increase significantly in terms of quality and life span. As the analyzed tourism system is nothing but a form of anthropogenic organization of space, the question is “what is man's destiny, to have a long dull life or a short and intense one” (Filimon, 2007). The answer relates to a multitude of features which define human society at a time and a place.

CONCLUSIONS

In conclusion by analyzing the relational sequence of the natural and man-made milieu an attempt was made to capture the deviations and trends of development of tourist system Bâile Felix – Bâile 1 Mai spas so as to show an outlook of it and identify the its evolution prospects.

The results consisted in outlining an overview of the natural and human-related resources of the tourist system Bâile Felix Bâile 1 Mai spas, based on information taken from literature and field observations. It should be noted that for the analysis of the anthropogenic milieu only the tourism-related information was collected (number of accommodation and food catering units, the number of accommodation beds and food catering seats, number of rooms, the health recovery amenities, the leisure centres, conferences and exhibitions infrastructure etc.). An important contribution to this decision represented their spatial distribution, relatively concentrated at the two resorts: Bâile Felix and Bâile 1 Mai spas. The analysis of specific infrastructure and field observations highlighted some deviations (variations), on which three trends of development of the tourist system Felix - 1 Mai spas were simulated namely: I - The evolution follows this trend; II - Evolution stagnates; and III - Evolution follows a different trend. In order to impose some control on the evolutionary trend of the analyzed system, a set of measures were identified and recommended that help to remedy the problems facing the tourism system. The highlighted problems refer to: Nature Reserve Natural Reserve “Pârâul Peța” deterioration and lack of alternatives for leisure; lack of parking space; low level of staff training employed in tourism, the poor quality of tourist services, expensive in terms of price - quality; lack of an integrated tourist promotion-capitalization plan; decreased water flow and mesothermal water temperature etc. The proposed measures support the identified problems in the study area recovery. How they will be implemented or not by stakeholders will lie at the foundation of sustainable development, a responsible tourism destination from on the left bank of Crisul Repede River, in close proximity to Oradea municipality.

REFERENCES


Borza Al. (1917), Floarea de Lotus de la Oradea, Unirea, Blaj, XXVII, 4.

Borza Al. (1924), Floarea de Lotus de la Oradea, Revista Științifică V. Adamachi, Iași, IX, 1.


Ilieș Dorina Camelia, Herman G.V., Dehoorne O., Măduța F. (2013), The role and the importance of cyclotourism in the development of the Oradea Metropolitan Area (Romania), GeoJournal of Tourism and Geosites, Year VI, no. 2, vol. 12, November 2013, pp. 101-110.

Ilieș Dorina Camelia, Ilieș A., Herman G.V., Baias Ş., Morar C. (2011), Geotourist map of the Bâile Felix – Bâile 1 Mai -