

## **GEOTOURIST MAP OF THE BĂILE FELIX – BĂILE 1 MAI - BETFIA AREA (BIHOR COUNTY, ROMANIA)**

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**Abstract:** The paper describes the characteristics, criterias and methodology used for the creation of the Geo-tourist map of Băile Felix – Băile 1 Mai - Betfia Area (Bihor County), located at the contact of the Tășadului Hills and Tisa Plain. The geo-tourist map derived from the geological and geomorphological maps and combined the most evident geological-geomorphological features with fundamental tourist information. The goal was to produce a map that could be easily interpreted by tourists, to help them better understand the landscape. The geo-tourist map is a thematic pocket foldable colour map which will be printed with illustration notes both in Romanian and English. In addition, the tourist map contains a synthetic description of the main geological-geomorphological aspects, accompanied by relevant photos and information on excursion trails, behaviour rules, restaurants, tourist attractions in the surrounding areas etc. This type of map can succesfully contributes to the initiatives of local and regional stakeholders to improve tansfer of knowledge and tourism promotion.

**Key words:** Geo-Tourist Map, Băile Felix, Băile 1 Mai, Betfia, Romania

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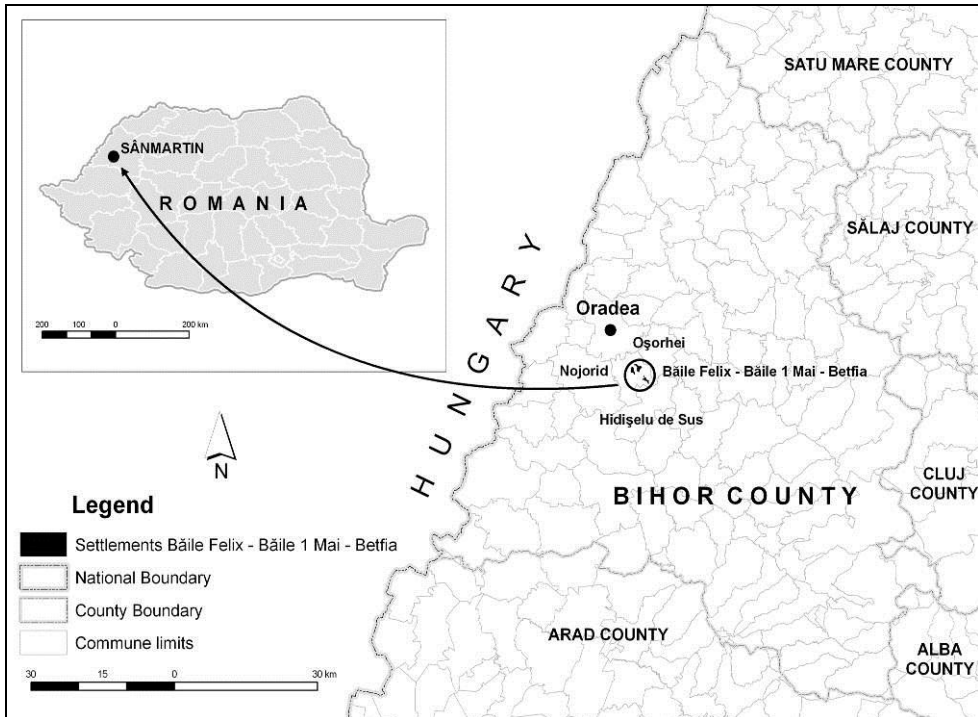
### **INTRODUCTION**

The geographical location determined by the altitude and latitude plays a decisive role in the existance, evolution and diversification of the tourism phenomena and elements, creating premises for a wide range of geotourist maps. The study area overlaps the Eastern part of the Sânmartin Commune of Bihor County (in the North-Western part

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of Romania), being bounded by the triangle formed by three component localities of the commune: Băile 1 Mai, Băile Felix and Betfia (figure 1).



**Figure 1.** The location of the Băile Felix - Băile 1 Mai – Betfia area

The study area natural setting, support of all elements, mechanisms and activities represents the „*touristification*” base of a territory (Cazalais et al., 2000). Holding a high and diversified potential, it is positioned at the contact between the Tășadului Hills, part of the Lăzărenilor Hills and the Miersigului Plain, subunit of the Western Romanian Plain. On a hilly background relief, shaped on a valley corridor that spills to the contact between the hills and high plain, the study area morphological elements are represented by energy of relief of about 200 m, determined by the lowest point of the Peța Valley and the highest elevation of 364 m in Șomleu Hill (figure 2).



**Figure 2.** Șomleu Hill and the Natural Reservation



**Figure 3.** Băile 1 Mai Resort. Swimming pool with waves (built 107 years ago)

One of the base resources that have caused the main motivation to “*touristify*” a territory is the thermal water (Cocean, 2005). Its use from Antiquity is attested by numerous archaeological evidences discovered over the territory of the three settlements, each with different names specific to certain historical periods (Munteanu et al., 1975, Munteanu et al., 1979): Băile Oradiei (Thermae Varadienses, Oradiei Spa), Băile Felix (Băile Sânmartin) and Băile 1 Mai (Saint Ladislau Spa, Haieului, Episcopești Spa etc). The period marking the use of thermal water (figure 3) and developing of the first centres with tourist and curative specific of the Băile Felix-Băile 1 Mai tourist system dates from the 18th century, and the maximum period of extension and infrastructure development dates from the second part of the 20th century (figures 2 and 3).

### **THE STUDY METHODOLOGY**

Concerns for developing geo-tourist maps in the region are of relatively recent dates and belongs to the researchers from the Department of Geography, Tourism and Territorial Planning at the University of Oradea. The information analyzed in this study come from direct observations of authors in the study area over several years, as well as from literature and official sources of statistical data. The analytic study has proceeded from the study of cartographic materials considering existing information (Baias et al., 2010), created over time by various researchers (Ilieş and Josan, 2009) for various purposes. Thus, using the principles, methods, tools and models verified and applied in the literature (William, 1998; Ianoş, 2000; Gunn and Var, 2002; Castaldini et al., 2005; Castaldini, 2008; Coratza et al., 2008; Castaldini et al., 2009; Ilieş and Josan, 2009a; 2009b, etc), this scientific endeavor is the skeleton of a thematic approach that seeks to address the concept of integrated tourism (Rieser, 2000) and shaping a tourist complex with a high degree of functionality.

The geo-tourist map was derived (with appropriate simplifications and integrations) from the geomorphological map. They combine the most evident geological-geomorphological natural and antropic features (e.g. bedrock, hydrography, terraces deposits, scarps, landslides, quarries etc) – which can be observed and recognised even by non-experts – with basic tourist information (e.g. tourist pensions and hotels, camping, roads network etc). The map legend consists of two clearly distinct categories one with symbols representing the geological-geomorphological characteristics and a second one showing symbols concerning to tourist information.

### **RESOURCES AND ELEMENTS GENERATING PREMISES FOR INCREASING THE TOURIST MOTIVATION**

Tourist rationale underlying the tourist system development of Băile Felix-Băile 1 Mai derives from the natural treatment of the main factors which are: the climate, the thermal and mineral water and the therapeutic mud. Thus, the thermal waters used for therapeutic, in both resorts come from various wells, including the first wells drilled at the end of the 19th century, Izbuc and Balint (Munteanu et al., 1987, pp. 40) certifying the age of first use of this resource, a first genetic factor of the area „*touristification*” (Cazelais et al., 2000).

The thermal water temperature is between 41° and 49° C at Băile Felix and at Băile 1 Mai between 34° and 49°C, being used in the treatment of rheumatic illnesses, rheumatic disorders, inflammatory, degenerative disorders, posttraumatic disorders, central and peripheral nervous system, gynecological disorders, metabolic diseases, diseases of nutrition and endocrine diseases etc. (Blaj et al., 1979, pp. 250). In terms of hydrochemistry, the thermal waters from the Băile Felix and Băile 1 Mai contain bicarbonate, sultanate, magnesium, sodium, with a mineralization around 0.8 and 1 g/l at Băile Felix and 0,6-0, 8 g/l at Băile 1 Mai (Țenu, 1981).



**Figure 4.** Natural Reserve Pârâul Pețea



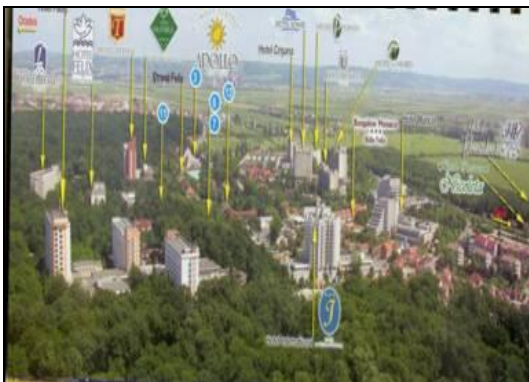
**Figure 5.** Indicative panel at the Reserve Pârâul Pețea entrance



**Figure 6.** Baile 1 Mai. The former casino building



**Figure 7.** Baile Felix. Apollo swimming thermal pool



**Figure 8.** Baile Felix Spa. Aerial photo-map  
(Source: The Travel Guide Oradea-Bihor, 2006-2007, pp. 65)



**Figure 9.** Baile 1 Mai. Tourist Map Model  
(Source: The Travel Guide Oradea-Bihor, 2006-2007, pp. 62)

Regarding the elements of the natural and cultural heritage of the study region it was elaborated the study area map containing several points of interest, of which the specific natural attractions (Mohan et al., 1993): the Nature Reserve

Pârâul Pețea with endemic element *Nymphaea lotus* var. *thermalis*, relict species, the *Melanopsis* snail species and an endemic fish – Racoviță's Roșioara (Blaj et al., 1979, 250, figure 4, 5), the Paleontology Reserve Betfia etc and others declared monuments of nature as the Betfia vertical Cave) etc.

Valuable items of the cultural heritage are also reported in the above mentioned area: e.g. Apollo Swimming thermal pool water din Băile Felix which is an architectonic monument from XIX century (figure 7); The building of the former Casino in Băile 1 Mai (figure 6); the Chapel in Haieu with elements of Gothic and Romanesque construction dating from the 14th century etc.

### **GEO-TOURIST MAP**

Until now there have been carried out several tourist maps for the resorts of Băile Felix and Băile 1 Mai, that can be viewed on the specific websites or in Oradea-Bihor Travel Guide (pp. 62, 64), published in 2006-2007 (figures 8 and 9).

As underlined by Castaldini et al., 2005, a geo-tourist map is a thematic map which focuses on a particular aspect and is consequently, directed to specific users.

The main goal was to develop a map easy to read and understand by tourists, represented by people with specialized training in this area or close to the domain, but also for people with no specialist training or even for people with secondary education (Castaldini et al., 2009, pp. 36).

For optimal reading the map to be resorted to a number as small as possible, clearly highlighted by symbols, is clearly divided into legend: category symbols representing the main features of geological-geomorphological setting (e.g. bedrock, hydrography, erosion level, slopes on cretaceous deposits, fluvial terraces, flood plain deposits, natural reserve etc), main elements of the landscape that a tourist can observe and identify.

Another category of symbols used characterized tourist information (the tourist information was mainly indicated with the commonly used colour (red) and symbols specific for tourist maps; they include: logistic information such as parking places, picnic areas, refuges, information points; general information (recommended trail, historical sites, chapel etc.).

An effort was made to use simple, clear, graphically pleasing symbols with short captions, geological profile for explaining the thermal water existence etc. The very specialized terminology was avoided, in the same time maintaining the accuracy from the scientific point of view.

Through the data combination, synthesis and generalization (ArcView GIS tools) it had resulted the study area geo tourist map. These documents are available in the digital format, too, so it can be easily updated and/or integrated with further data (Castaldini et al., 2009, pp.37).

The geotourist map (figure 10) contain also a synoptic description of the main geological-geomorphological aspects, accompanied by relevant photographs and information, proposal for a tourist trails and restaurants, cultural and natural attractions in the area and in the surrounding areas, behaviour rules etc.

### **CONCLUSIONS**

The geotourist map, thematic pocket colour foldable map, which will be printed with illustration notes both in Romanian and English, contains a synthetic description of the main geological-geomorphological aspects, accompanied by relevant photographs and information on excursion trails, behaviour rules, restaurants, tourist attractions in the surrounding areas etc. It can sucesfully contribute to the initiatives of local and regional stakeholders to improve tansfer of knowledge and to use this documents for tourism promotion.

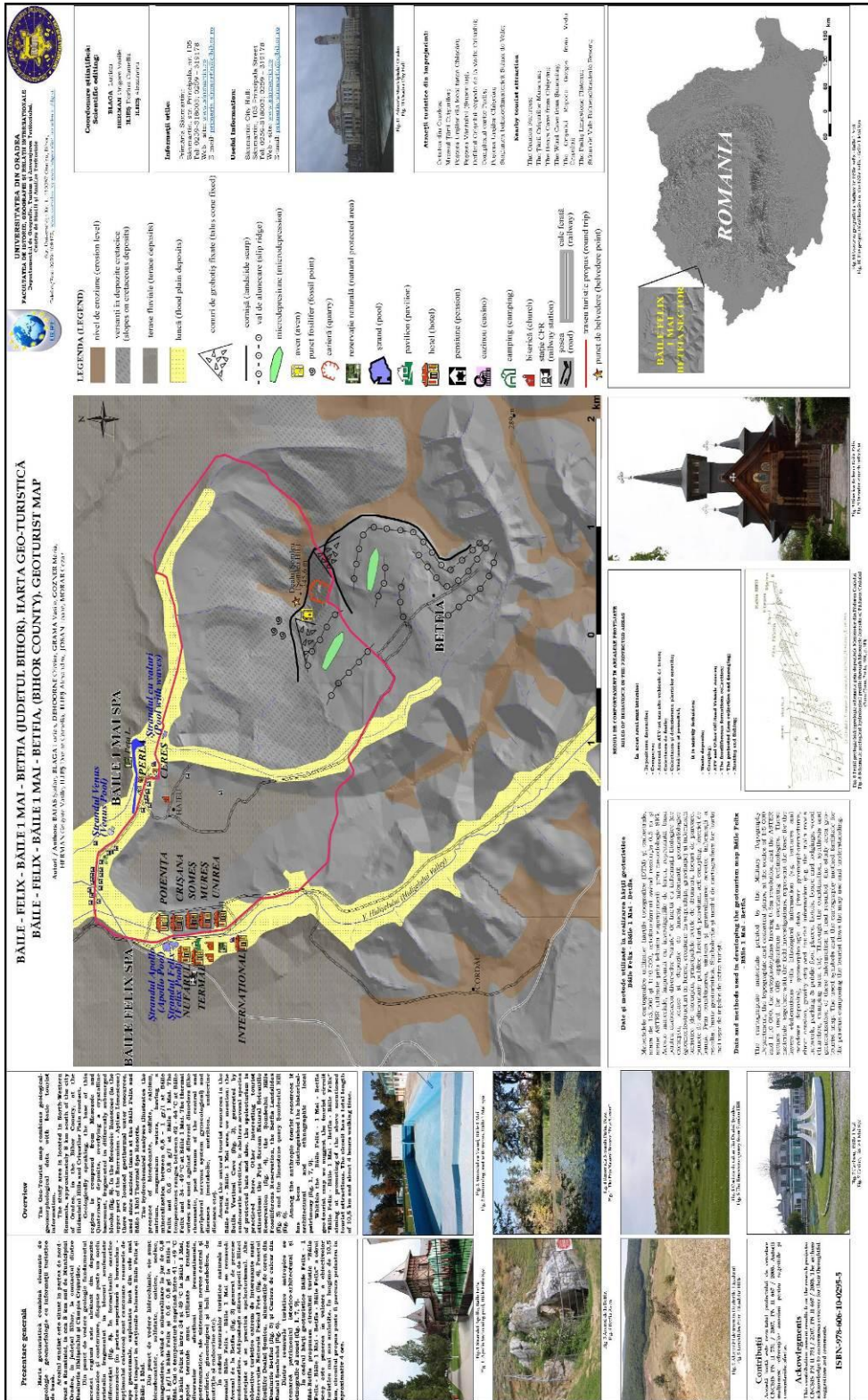


Figure 10. Băile Felix-Băile 1 Mai-Betfia (Bihor County), Romania. Geotourist Map (Source: Baias et al., 2010)

The mentioned documents were produced to meet also the ever-growing educational needs of public boards and contribute to a transfer of information from scientific research to possible users and local communities. These settings have facilitated the valorification of the study area which is visited by larger number of tourists each year. In this purpose we also suggested a tourist circuit aiming the promotion of the area natural and antropic attractions.

### Aknowlegments

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