The Pannonian Volcano Route
volcanological heritage and geotouristic perspectives

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Volcano tourism – Carpathian-Pannonian Region
Volcano tourism – Carpathian-Pannonian Region
Volcano tourism – Carpathian-Pannonian Region

Silicic ignimbrite sheets
Volcano tourism – Carpathian-Pannonian Region

Erosional forms of silicic ignimbrite sheets – beehive cliffs (fairy chimneys)
Volcano tourism – Carpathian-Pannonian Region

Emergent and then, collapsed andesitic composite volcanoes
Volcano tourism – Carpathian-Pannonian Region

Erosional remnants of various basaltic volcanoes in monogenetic volcanic fields
Volcano tourism – Carpathian-Pannonian Region

Volcanic heritage meets historic, cultural, gastronomic and winery pleasures, among others.
Volcano tourism – Carpathian-Pannonian Region

Novohrad-Nógrád Geopark (2010)

Kemenes Volcano Park (2012, 2013)

Bakony-Balaton Geopark (2012)

supporting framework of volcano tourism
Volcano tourism – Carpathian-Pannonian Region

Volcanic Heritage of the Carpathian–Pannonian Region in Eastern-Central Europe

Szabolcs Harangi

7.1 Introduction

The Carpathian-Pannonian region in eastern-central Europe appears to be a geologically calm area, where no disastrous earthquakes, no devastating volcanic eruptions occur. However, this is just the present status of this area; the past 20 million years were much more different (Harangi, 2011).

There are many opportunities to start a volcano discovery tour in this region. One can begin with an amazing walk observing different types of pumiceous pyroclastic flow deposits, i.e. ignimbrites and the fabulous conical fairy chimneys or beehive stones as the local people call them. Then, the visitors can take a path along one of the most destructive volcanic deposits, formed during nuée ardente.
Volcano tourism – to do list

- volcanic heritage could be a driving role to open a new way in the tourism
- volcano tourism could initiate the recovery of economy in otherwise poor regions
- a successful use of volcanic heritage can be achieved only if the local community, the decision-makers and the business-mans recognize the advantages of such novel projects
- most of the local people do not understand that an investment into the protection and exhibition of natural heritage could result in a promising opportunity to attract people and as a consequence it could enhance tourism and supply money into the local economy
- it is important to enhance the outreach activities that could help people understand how the Earth works, what is the significance of the volcanic activity in our planet and of course, why we have to protect the natural heritage
  - find the „language”
  - be simple, but attractive
  - keep the solid scientific background
Volcano tourism – outreach activities
Volcano tourism – a quantitative approach

PRELIMINARY GEOSITE ASSESSMENT MODEL (GAM) AND ITS APPLICATION ON FRUŠKA GORA MOUNTAIN, POTENTIAL GEOTOURISM DESTINATION OF SERBIA

Miroslav D. Vujčić, Djordijje A. Vasiljević, Slobodan B. Marković, Thomas A. Hose, Tin Lukić, Olga Hadžić, Sava Janićević

<table>
<thead>
<tr>
<th>Main Indicators / Subindicators</th>
<th>Grades (0-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>I Scientific/Educational values (VSE)</strong></td>
<td></td>
</tr>
<tr>
<td>1. Rarity</td>
<td>Common</td>
</tr>
<tr>
<td>2. Representativeness</td>
<td>None</td>
</tr>
<tr>
<td>3. Knowledge on geo-scientific issues</td>
<td>None</td>
</tr>
<tr>
<td>4. Level of interpretation</td>
<td>None</td>
</tr>
</tbody>
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**II Scenic/Aesthetic values (VSA)**

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<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2 to 3</th>
<th>4 to 6</th>
<th>More than 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Viewpoints (each must present a particular angle of view and be situated less than 1 km from the site)</td>
<td>None</td>
<td>1</td>
<td>2 to 3</td>
<td>4 to 6</td>
<td>More than 6</td>
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<tr>
<td>2. Surface (each considered in quantitative relation to other)</td>
<td>Small</td>
<td>-</td>
<td>Medium</td>
<td>-</td>
<td>Large</td>
</tr>
<tr>
<td>3. Surrounding landscape and nature</td>
<td>-</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Utmost</td>
</tr>
<tr>
<td>4. Environmental fitting of sites</td>
<td>Unfitting</td>
<td>-</td>
<td>Neutral</td>
<td>-</td>
<td>Fitting</td>
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</table>

**III Protection (VPr)**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>0.25</th>
<th>0.5</th>
<th>0.75</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Current condition</td>
<td>Totally damaged (as a result of human damage)</td>
<td>Highly damaged (as a result of natural damage)</td>
<td>Medium damaged (with essential geomorphologic features)</td>
<td>Slightly damaged</td>
<td>No damage</td>
</tr>
</tbody>
</table>

Transformation of volcanic heritage value to touristic value
The Pannonian Volcano Route

a 900 km long volcano route crossing Hungary from east to west over 50 planned stations, which cover almost all the main volcanological phenomena
The Pannonian Volcano Route

9 target areas offering additional local volcano routes
The Pannonian Volcano Route

Continuation to the neighbouring countries
Perspective - The European Volcano Route Initiative

a unique development across active and inactive volcanic areas