

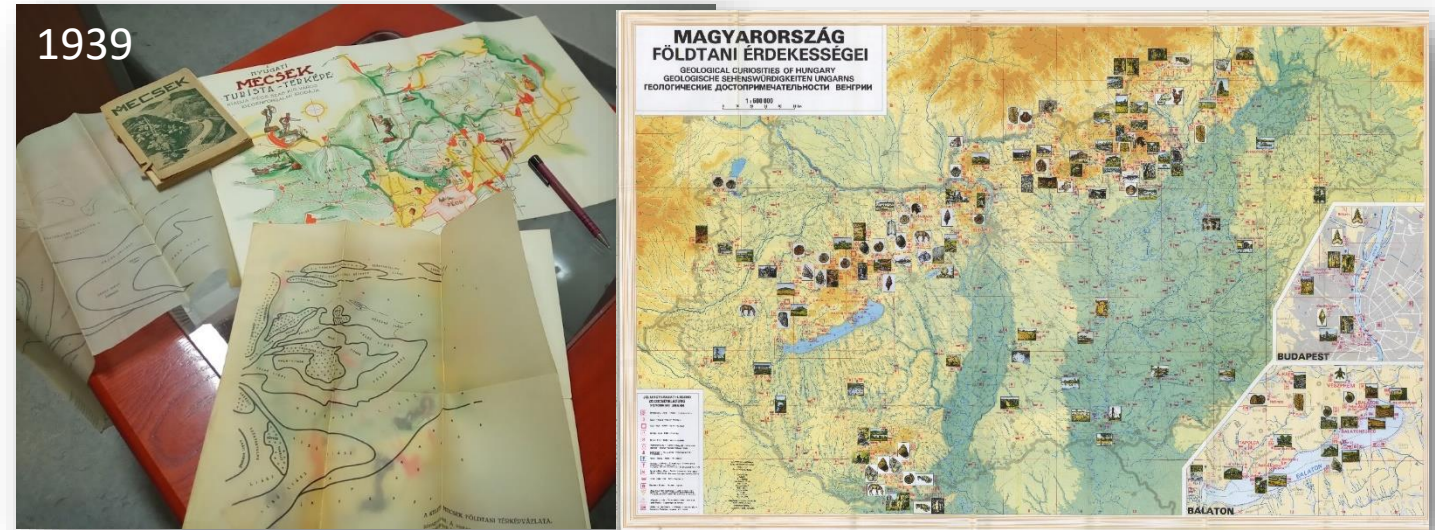
Geological maps for geotourism in Hungary

Gáspár Albert¹, Márton Pál²

¹Associate professor at ELTE, Eötvös Loránd University, Institute of Cartography and Geoinformatics; albert@ludens.elte.hu

²PhD student at ELTE, Doctoral School of Earth Sciences

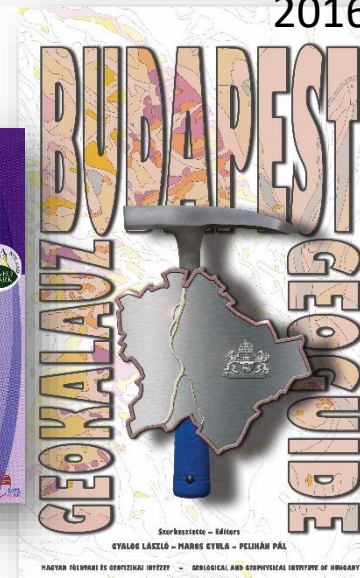
1989



1939



2016



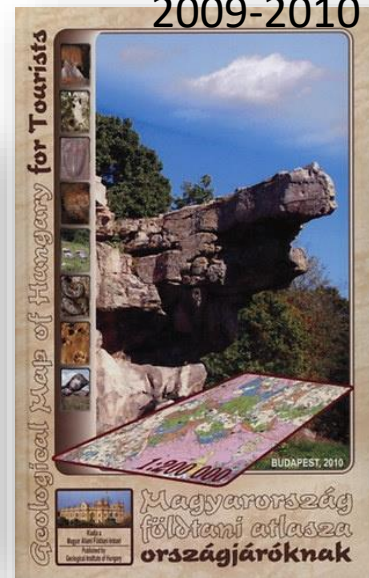
2018



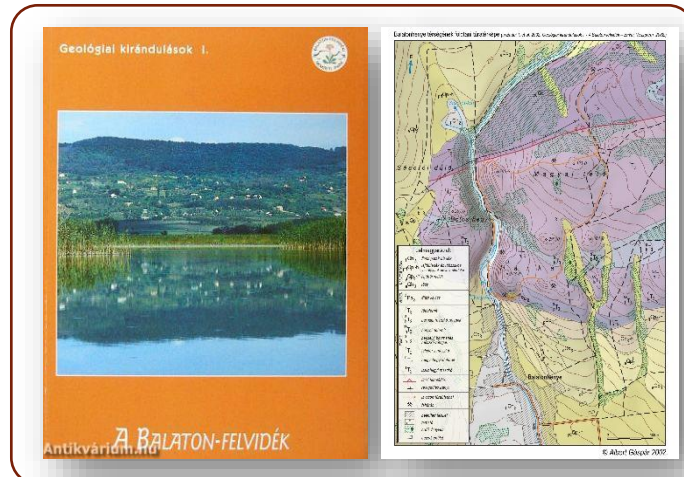
2012



2009-2010



2002





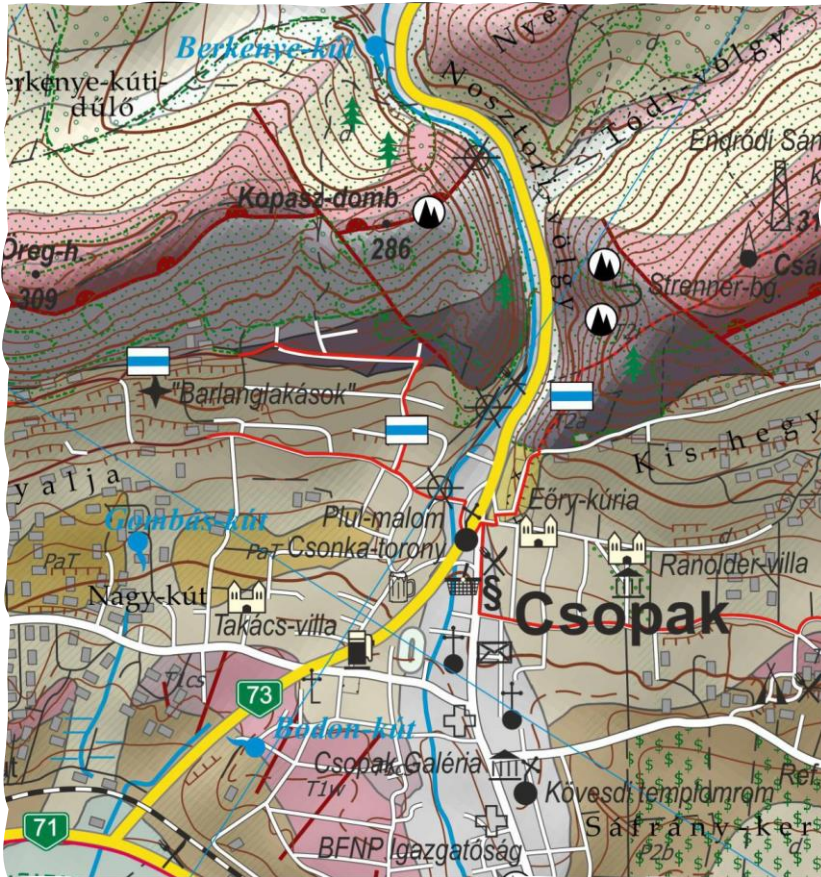
I can't see!

The role of geotourist maps

Communicating science to people
... but at the moment we have
mostly maps for scientists.

As you can see on the map, we are standing at the boundary of the marine and terrestrial formations ...

Advantages and requirements of geological maps for tourists



Geological hiking map (Albert et al. 2018)

Advantages:

- Can be accessed easily at gift shops or online
- Understandable for avg. people
- Practical on both guided and individual tours

Requirements:

- Show less geology and more topography (~50%-50%*)
- Usable on the field
- Geosites, POIs, tourist info
- Explanations (e.g. rock types & processes)

*In terms of the no. of symbol types

Two-way communication

12. Tihany,

Kedves Látogató!

Az alábbi QR-kód vagy link használatával elérhető kérdőív kitöltésével Loránd Tudományegyetem Térképtudományi és Geoinformatikai Tanszék kutatói projektjében nyújthat segítséget. Munkánk célja, hogy a Balaton-felvidék turisztikailag hasznosítható geológiai érdekességeit felmérjük, ezeket tudományos szempontok alapján értékeljük. Ebben kérjük az Ön segítségét. Ennek lényege, hogy a terület legjelentősebb földtani értékeinek különböző tulajdonságait minden látogató pontozza az alapján, hogy azokat mennyire tartja fontosnak.

A kérdőív 27 szempontot tartalmaz, és kitöltési ideje 5-8 percet vesz igénybe. Segítségét, ránk áldozott idejét nagyon köszönjük! Amennyiben részletesebben érdeklődik munkánk iránt, látogassa meg kutatócsoportunk honlapját: ktk.elte.hu.

Pál Márton és Dr. Albert Gáspár



<https://hyperurl.co/nyereg-hegy>
(A QR-kód és a link egy biztonságos Google Form-ra mutat.)



Bakony-Balaton

Geopark

Scientists know what is important from scientific aspects, but do the visitors think the same? Not necessarily!

Dialogue is needed to bring opinions closer together!

From scientists to visitors:

- Guided tours
- Explanatory signs
- Visitor centres
- Maps and books available for purchase

From visitors to scientists:

- Ask the guides! They can answer, because they are trained!
- At geosites marked on the map we ask hikers about their opinions about the state and importance of the place.

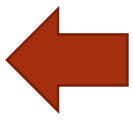


Summary of our experience with geological maps for tourists

- There is a growing interest in geological information in Hungary
- The maps should emphasize the spectacular geosites (assessment before editing is recommended)
- Maps don't (usually) stand on their own „financial legs”: a background is needed, a community of users
- Geotour guides gave the most positive feedback
- **The geological hiking maps have already reached orders of magnitude more people than the classic scientific maps!**

Ok, come on, make geotourist maps! They surely are better than the color photocopies of the specialist maps!

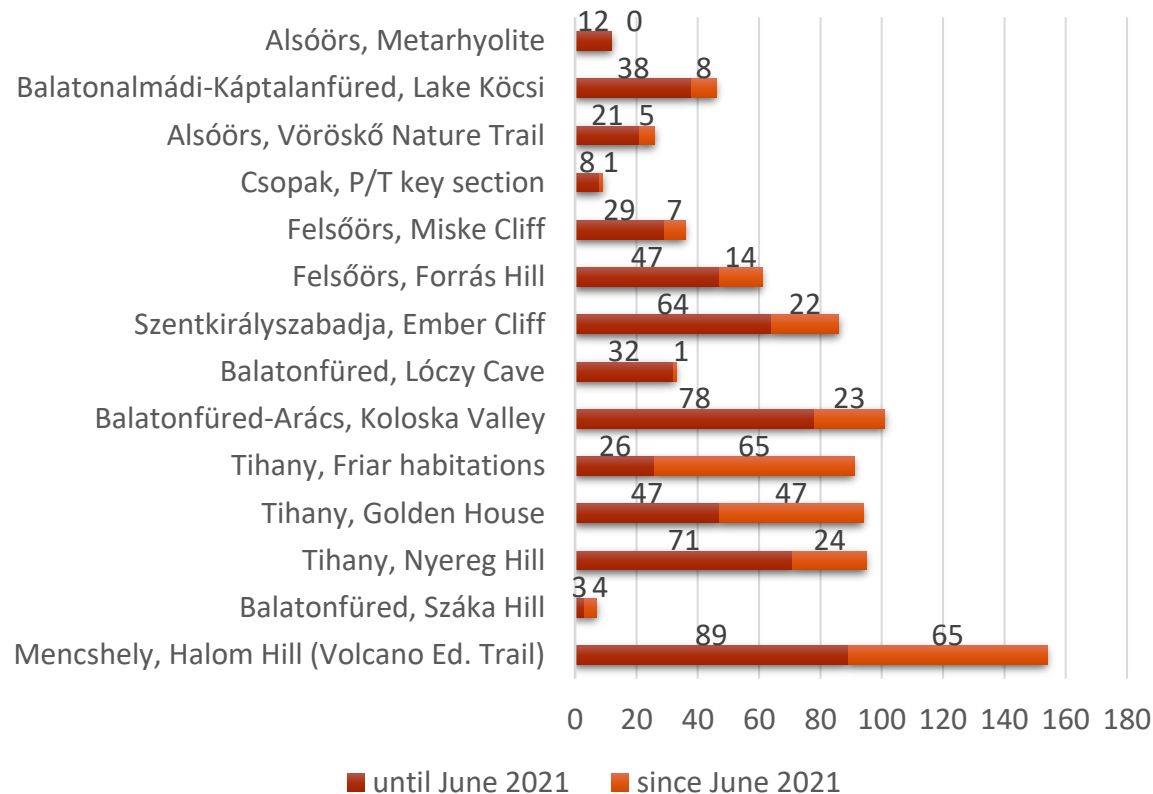




Back to slide 4

Additional information on the studied sites

Questionnaire fills per geosite



Query sites

All are located in the Bakony-Balaton UNESCO Global Geopark (Hungary)

- 14 sites (since 2018);
- All were selected based on a geosite assessment
- 27 questions per query based on geosite assessment criteria (GAM)
- 0-65 fills per year

Paper on the topic:

Pál, M., Albert, G. (2021): Examining the Spatial Variability of Geosite Assessment and Its Relevance in Geosite Management. *Geoheritage* 13, 8, <https://doi.org/10.1007/s12371-020-00528-6>



Back to slide 4

The geotour- guide training

- The training series in Hungary started in 2009
- More than 200 people got certificates (photo IDs) in the training courses
- 2 courses per year with 15-25 participants
- Active guides: 15 independent, 4 geopark employees

Data from the Bakony-Balaton UNESCO Global Geopark (Hungary)

Established: 2012

Area: 3200 km²

Info about the presented geotour maps

- Albert, G. (2002) Geological hiking map of the Balatonhenye area. – only in Hungarian: Balatonhenye környékének földtani túratérképe. In Budai, T., Csillag, G., Koloszar, L., Müller, P., Németh, K. (2002). Geológiai kirándulások I. – A Balaton felvidék. Balaton-felvidéki Nemzeti Park Igazgatósága, Veszprém.
- Albert, G. (2004): Geoscientific results in “tangible” format: the geotourist map. – only in Hungarian: Földtudományok eredménye "kézzelfoghatóan": A földtani túratérkép. Geodézia és kartográfia, 51(7), 27-30. ([ResearchGate](#))
- Albert, G., Pál, M., & Schwarcz, G. (2018). Geological hiking map of the surroundings of Csopak 1:30,000. – Bilingual; Hungarian title: Csopak és környéke geotúra térképe. Tök, Hungary: Schwarcz Maps. ([LinkedIn](#))
- Albert, G., Hegedűs, Á. (2021): A geological hiking map curiosity from 1939, Abstr. Int. Cartogr. Assoc., 3, 2, <https://doi.org/10.5194/ica-abs-3-2-2021>.
- Budai, T., & Gyalog, L. (Eds.) (2010). *Geological map of Hungary for Tourists 1:200,000*. Budapest: Geological Institute of Hungary. Retrieved from MBFSZ map server: <https://map.mbfsz.gov.hu/atlasz200/>
- Gyalog, L., Pelikán, P., & Maros, G. (Eds.) (2016). *Budapest geoguide and geological map 1:50,000*. Magyar Földtani és Geofizikai Intézet. Retrieved from MBFSZ map server: <https://map.mbfsz.gov.hu/bp50/>