

Geocaching - New nontraditional form of tourism

ŽOFIA KUZEVIČOVÁ¹, MARCELA GERGELOVÁ¹, ŠTEFAN KUZEVIČ²
and ROLAND WEISS³

¹*Institute of Geodesy and Geographical Information Systems, F BERG, Technical University of Košice, 9, 040 01 Košice, Slovakia*

(E-mail: zofia.kuzevicova@tuke.sk, marcela.gergelova@tuke.sk)

²*Institute of Business and Management, F BERG, Technical University of Košice, Letná 9, 040 01 Košice, Slovakia*

(E-mail: stefan.kuzevic@tuke.sk)

³*Institute of Geotourism, F BERG, Technical University of Košice, Letná 9, 040 01 Košice, Slovakia*

(E-mail: roland.weiss@tuke.sk)

ABSTRACT

New trends in tourism based on changes in society, in people's lifestyles, development of information technology and progress in thought. Tourism should try to capture these changes, of course, accept and adapt their offer. Currently is experiencing the development of non-traditional forms of tourism namely geocaching. Geocaching combines a desire for adventure, achievement challenges, overcome their skills, visiting interesting places, the opportunity to learn and learn something new, meet new people. The article is devoted to and brief describes this phenomenon of modern tourism with examples of functioning in practice. Geocaching is a fun form of travel, where the player visits different sites and basically supports the local tourism.

Key words: cache, nontraditional forms of tourism, geocaching

INTRODUCTION

Forms of tourism are determined motivation visitor's specific needs and implementation of tourism. The traditional form of tourism is described in paper of Štrba [20]. The tourism industry is increasingly using new technologies, such as Web cameras, navigation devices, PDAs, local contextual services (LBS - Location Based Service), digital TV and so on. [1] The main forms of tourism are constantly added new non-traditional forms such as Geocaching.

Geocaching is classified as a new non-traditional form of tourism, which records dynamic global development and growth. Geocaching is gaining more fans, not only in Slovakia, in Europe, but virtually all around the world. Often become

participants of outdoor activities the whole family with their children.

The increase in popularity is largely attributed to a reduction in the prices and availability of navigation devices connect to the internet.

The tourism industry is one of the main factors localization classified natural resources (topography, hydrography, vegetation, etc.). Cultural and historical attractions, sporting events and feasibility conditions (transport, accommodation and catering facilities).

Geocaching as a form of tourism is associated with natural resources as well as cultural and historical assumptions. Stash games geocaching is usually based in natural, cultural or historical attraction so that finding was associated with trips and exploring.

PRINCIPLE OF GEOCACHING

Geocaching is a tourist, navigation and outdoor activities, whose main task is to find the hidden boxes called cache, as specified geographic coordinates. To obtain the coordinates registration is required on the website [2], which also serves to record keeping and statistics.

Each cache is described by the so-called listing, which provides basic information about the cache, the coordinates (coordinate system WGS-84), type, size, difficulty and terrain. In addition to this information may also contain additional attributes. Attributes communicate what to expect at a cache location (e.g. Permissions - Allowed / Not Allowed - Dogs, Bicycles, Conditions - Yes / No - Difficult Climbing, Night Cache). [3] Listing also includes a narrative description that introduces the topic of things, in which the cache is stored.

GPS navigation device is an essential part of the game. Description of system operation, methods of signal processing and refinement options positioning are more concerned in work Gašincová [18] and Kukučka [19]. Currently, most mobile devices, phones, PDA poss. the tablet has implemented GPS. After installing the software (eg ReliRescue GPS, Gcz II, BasicGPS for Geocaching) [4] such a device can also be used for geocaching.

Finding a cache is affected by several factors:

- accuracy of the instrument (hiking GPS can be accurate to within a few meters),
- location of the cache (in a place where there is enough available signal),
- inaccurate focus,
- camouflage of a cache (Fig. 1). [17]



Fig. 1 Camouflaged cache (photo: Kuzevičová)

TYPES OF CACHES

Caches can be of different types, different sizes and shapes. The rules for setting cache are clearly defined and their compliance with the rules is supervised by local volunteers – reviewers, who cache formally approved and published the listing of cache on the internet.

Distribution of caches by size:

- Micro (size boxes of film format, usually contains only a guestbook, so. Logbook)
- Small (small containers for smaller predmrtly to replace a logbook, with volume up to 1 liter)
- Regular (container for storing larger items and logbook, volume greater than 1 liter)
- Large (twenty liter container and more)

Geocache Types:

- Traditional Cache - This is the original geocache type consisting of, at minimum, a container and a log book or logsheet,
- A Multi-Cache ("multiple") - involves two or more locations. The final location is a physical container,
- Mystery or Puzzle - this form of geocache may involve complicated puzzles that you will first need to solve to determine the coordinates,
- Wherigo™ - Wherigo is a toolset for creating and playing GPS-enabled adventures in the real world,
- EarthCache - is a special place that people can visit to learn about a unique geoscience feature of our Earth.
- Event Cache - is a gathering of local geocachers or geocaching organizations to discuss geocaching. [2]

EARTHCACHE

Earthcaches are a type of geocache that are listed on geocaching.com. They use additional guidelines when developed so that they provide a unique experience - a learning experience about Earth science.

The most exciting way to learn about the

Earth and its processes is to get into the outdoors and experience it first-hand. Visiting an Earthcache site is a great outdoor activity the whole family can enjoy. The Geological Society of America (GSA) administers the listing of Earthcache sites around the world. [5]

An Earthcache site is a special place that people can visit to learn about a unique geoscience feature or aspect of our Earth. Visitors to Earthcache sites can see how our planet has been shaped by geological processes, how we manage the resources and how scientists gather evidence to learn about the Earth. [5]

At 5th June 2013 is placed worldwide 16190 Earthcaches placed. Slovakia is with 100 existing Earthcaches ranks 20th place worldwide. (Table 1)

Slovakia is among the most important sites classified Strbske Pleso (Mountain lake) (GC2GYH4) [15] - most visited EarthCace, Janosik Holes (GC1DG0W) , Sandberg - The Slovak desert (GCZT9M) [14], Sucha Bela gorge / Dry White Gorge (GC26JXX) and Lomnický Peak (GC19R1D) [13]. Oldest placed Earthcache is Putik's hill (GCZNQG) [16] placed 4.12.2006

The Czech Republic is generally placed 514 Earthcaches (to 5.6.2013), as it ranks fifth in the world. Through this type of cache can promote a more attractive destination. An example might be a cache Kadovský viklan - Kadov Balance boulder (GC1YG5E) [6] (Fig. 2).

The text appearing in the listing:

„Balance boulders are a large rounded stones located separately on the meadows or in the woods and only a small part lies on the rock subsoil. The most famous Czech balance boulders is rocking stone lying in the south-east edge of the village and then got Kadov name Kadovský balance boulder. Block is on 1 meter high rock. A measuring of the balance boulder circumference is more than 11 meters. In 1985 he was balance boulder designated natural monument, but the attention of scientists caught already in the 19th century. The oldest records are from the balance boulder

in 1856 and this period also originated as a description of stone balance boulder. Not only scientists attracted the block, but also the masons, who carved into it recesses for the establishment wedge so that the stone after he broke. Thanks to the district governor the stone protected from breakage. In 1893 the stone was moved from a group of enthusiasts its original position by 1.5 meters. The original stone was returned to the place in 1983 with the contribution of Mr. Pavel Pavel, who is known for its studies on the movement of the statues on Easter Island. From the village Kadov was about balance boulder marked nature trail Kadovský balance boulder. The balance boulder leads also marked hiking trail.“ [6]

Tab. 1 Ranking of countries according to the number placed EarthCaches

| Ranking | Country | Count |
|---------|----------------|-------|
| 1 | United States | 6198 |
| 2 | Germany | 3135 |
| 3 | Canada | 1125 |
| 4 | United Kingdom | 722 |
| 5 | Czech Republic | 514 |
| 6 | Austria | 363 |
| 7 | France | 353 |
| 8 | Netherlands | 347 |
| 9 | Portugal | 316 |
| 10 | Australia | 289 |
| 11 | Spain | 259 |
| 12 | New Zealand | 246 |
| 13 | Sweden | 199 |
| 14 | South Africa | 175 |
| 15 | Italy | 169 |
| 16 | Norway | 115 |
| 17 | Switzerland | 106 |
| 18 | Belgium | 102 |
| 19 | Denmark | 102 |
| 20 | Slovakia | 100 |

Data source: [5]

GEOCACHING AND GEO TOURISM

One possibility is acquaintance with

geological heritage is geoturizmus. The authors show earthcache geological interest, and describe cache statistics to inform and educate. Players will learn things here that relate to the geology of the site or shaping the geosphere, or exploring the geological history of planet Earth. The aim of cache and also one of the essential conditions for the establishment is that it must have an educational character that the player learn new knowledge about the Earth resp. geological aspects that are related to the location and actively acquiring this information. Partner in the development and control arbiter is the Geological Society of America.

On Štrbské Pleso is created a game and educational tour. (Fig. 3)



Fig. 2 Kadov Balance boulders (photo: author Kuzevičová)



Fig. 3 Information brochure [9]

For novice geocachers are ready and GPS car navigation services, which are available on site ski jumps at Štrbské Pleso, are suitable for geocaching, but also for other lovers of hiking, biking and climbing. The aim of this project is to teach novice geocacher work with outdoor GPS navigation, find the first cache, but also offer them the opportunity to get to know and learn about locations Strbske Pleso and flora and fauna of TANAP. For those interested are formed two lines: long or short. [7] [8]

In the Czech Republic the enormous popularity of geocaching, and even got into the curriculum: students of Czech Technical University geocaching play in physical education and receive credit for it. [10]

Geocaching in the national park Šumava - Report NP is involved in passive and active. Provides players with a space welcomes and appreciates Geocachers activities in national parks. The first cache based directly park called "spruce bark beetle 2009" is available from 12 11 2009. It's a box with more stages, while finding the final box is conditional on the correct answers to the questions in the previous ones. Multicache Next "šumavském In Paradise" was founded in 2010 in memory of the devastating storms of 21th october 1870s. [11]

New tourist circuit in the village Říčany for pedestrians and cyclists is also a way of finding the treasure by GPS. City Říčany came up with the idea to combine modern traveling through GPS with traditional visiting the city. Inspiration has become a worldwide game of geocaching. A similar project is already operating successfully in Camp or in Vlašimi. Circuit with eight stops added hidden "treasures" that a citizen or visitor to the city looking for. It must also intend to supplement opinions rightly points to puzzle the instructions in the leaflet that each participant gets to play tourist information centers or print it from the website. After solving a puzzle gets at the Infocenter symbolic gift. [12]

Similar examples are mainly in the Czech

Republic much more compared to Slovakia.

CONCLUSION

The great advantage of geocaching is that each player can customize the game to their needs, abilities and interests. It is a universal pastime for individuals and families. For families with young children is special circuits created taking into account the difficulty of the terrain and such with a fabulous theme.

Part of the game is to visit the non-traditional locations such as historic workings forgot technical monuments, historical military objects.

About geocaching creating a strong community of people who come together, share experiences, organize meetings and joint activities.

Geocaching is a game that brings people together, brings them back to nature and leads children to a sensitive and responsible approach to nature, cultural heritage and property.

REFERENCES

- [1] **ZELENKA J. et al.:** e-Tourism v oblasti cestovného ruchu, World Media Partners, s. r. o., Ministerstvo pro místní rozvoj ČR, Praha 2008, ISBN 978-80-87147-07-8,
- [2] www.geocaching.com
- [3] <http://www.geocaching.com/about/icons.aspx> [cit. 01-06-2013]
- [4] <http://www.freewarepocketpc.net/ppc-tag-geocaching.html> [cit. 01-06-2013]
- [5] <http://www.earthcache.org/> [cit. 01-06-2013]
- [6] <http://www.coord.info/GC1YG5E> Kadovsky viklan [cit. 05-06-2013]
- [7] <http://www.slovakia.travel/entitaview.aspx?l=1&idp=83804> [cit. 05-06-2013]
- [8] <http://www.proevents.sk/sk/gps-geocaching> [cit. 05-06-2013]
- [9] http://www.proevents.sk/web/user_files/ako-funguje-geocaching-na-strbskom-plese.pdf
- [10] <http://www.czech.cz/cz/Turistika/Kam-jit,-co-navstivit/Specializovana-turistika/Geocaching-v-CR>
- [11] <http://www.npsumava.cz/cz/1610/sekce/geocaching-v-narodnim-parku/>
- [12] <http://www.ricansko.info/clanky/geocaching-v-ricanech-turiste-mohou-najit-poklady>
- [13] http://www.geocaching.com/seek/cache_details.aspx?wp=GC19R1D&Submit6=Go
- [14] <http://www.coord.info/GCZT9M> Sandberg - The Slovak desert
- [15] <http://www.coord.info/GC2GYH4> Strbske pleso (Mountain lake)
- [16] <http://www.coord.info/GCZNQG> Putik's hill earthcache
- [17] <http://www.coord.info/GC2RRX2> Radyne ze vsech stran – jih
- [18] **GAŠINCOVÁ, S., GAŠINEC, J., STAŇKOVÁ, H., ČERNOTA, P.I.:** Porovnanie MNS a alternatívnych odhadovacích metód pri spracovaní výsledkov geodetických meraní In: SDMG 2011 : sborník referátů 18. konferencie : Praha, 5.-7. října 2011. - Ostrava : VŠB-TU, 2011 P. 40-50. - ISBN 978-80-248-2489-5
- [19] **KUKUČKA, P., WEISS, G., LABANT, S.:** The use of global navigation satellite systems for deformation analysis of the Dargovských hrdinův housing estate In: Acta Montanistica Slovaca. Roč. 16, č. 4 (2011), s. 319-327. - ISSN 1335-1788
- [20] **ŠTRBA, L., BALÁŽ, B., MIXTAJ, L., WEISS, E.:** Geotourism potential of the Silica Plateau (Slovak Karst, Slovakia) In: Present issues of Geotourism in Slovakia and Hungary. - Brusel : EuroScientia, 2011 P. 83-92. - ISBN 978-90-818529-0-6