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Geocaching – the global phenomenon of the 21st century

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Prohlašuji, že jsem práci zpraco uvedených pramenů a literatury.	oval(a) samostatně	a použil(a) jen
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1 Introduction

The aim of the present thesis is the introduction of the outdoor activity called Geocaching and the analysis of its popularity in the course of time, or different countries and the analysis of the fact why geocaching has become the phenomenon of the 21st century. The thesis is accompanied by the glossary of geocaching terms.

The thesis is comprised of theoretical part describing the geocaching itself, its history, the princip, geocaches, events, trackable items, the equipment of a geocacher, or the Czech geocaching. There are also mentioned some interesting facts about geocaching, such as important dates from the history, or some unique geocaches and other.

The theoretical part is followed by a practical part comprising from four parts. The first part is the analysis of the popularity of Geocaching on the basis of the statistics from Google. There are graphs that show the interest of people in geocaching for a certain period of time and a graph that shows in which countries is the biggest interest in geocaching is. The second part includes a few statistics using data from the Groundspeak and the project-gc.com with my commentaries. The third part is the analysis of the reasons why people do geocaching. In this part there were used several statements of the real geocachers from the whole world complemented by my commentaries including my own experience. The last part is a supplement to all previous parts and consists of a few problems that are connected with geocaching using my own experience from 10 years of geocaching. At the end of each chapter of the practical part there is a conclusion including my own opinions.

At the end of the thesis there is a glossary of the terms and acronyms used by geocachers with the equivalent in the Czech language and with the meaning.

2 Geocaching

2.1 What is geocaching?

Geocaching is a real-world, outdoor treasure hunting worldwide game. Participants seek geocaches hidden on many places around the world with the help of GPS device. The GPS leads them to some definite coordinates, where they try to find the cache.

2.2 History

GPS (Global Positioning System) was originally created by the US Department of Defense. This satellite navigation system was originally meant for military use and therefore there was a deviation added to the GPS signals. The accuracy for the civilians was about 100 meters. On May 1, 2000, President Clinton announced the planned turning off of this deviation, known as Selective Availability (SA). On May 2, 2000, the Selective Availability was turned off. The accuracy for the civilian use got better to 10 meters.[1]

On May 3, Dave Ulmer, a computer consultant, wanted to test the accuracy and hid a container in the woods near Beavercreek, Oregon, near Portland. (Later there has been placed "The Original Stash Plaque" that commemorates this event nowadays.) The idea was hiding a container out in the woods and then noting the coordinates of its location with the help of some GPS device. Other people would then try to find the container with the use of their GPS device. After finding it, they could take something from the container, but they would have to also put something theirs inside the container instead of it. In other words, this was the beginning of one of the current geocaching basic rules: "Take some stuff, leave some stuff." He called the whole idea the "Great American GPS Stash Hunt" and posted it along with the coordinates of his own container on some internet website for those who were interested in GPS. The container he hid was a black bucket that contained a logbook, a pencil and a few things for the exchange such as for example some books, software, videos, or a slingshot.[2]

By May 6, 2000, his container had been found twice and logged once (by Mike Teague of Vancouver, Washington).[3] Throughout the next week, more and more people were thrilled by this idea of hiding and finding stashes, so they began hiding their own containers and posting their coordinates. Within the first month, Mike Teague, the first person that found Ulmer's stash, began gathering the online posts of coordinates around the world and putting them on his own home page. There was also created a mailing list "GPS Stash Hunt" for discussing anything related to this developing activity. One of the things discussed, was also replacing the name "stash" with another one. One of the ideas was "geocaching", which was used on May 30, 2000, by Matt Stump for the first time.[4]

Jeremy Irish, a web developer for a Seattle company, came across the Mike Teague's website in July, while doing research on GPS technology. He found it interesting and immediately purchased his own GPS device and tried it. He was thrilled by this experience, so he decided to create a new website for this activity. In cooperation with Mike Teague he created "geocaching.com" and used his professional web skills to create tools to improve the experience from hunting. This new website was announced on September 2, 2000. There were 75 known caches in the world at that time. Since then, more and more people have become involved in geocaching. They found out about it through word of mouth, from the articles in the press, or they have even found some cache by an accident.[5] Nowadays, geocachers are not only those GPS enthusiasts, but also ordinary people, families. You can geocache anywhere in the world during a walk, when you ride a bike, ski or even dive.

2.2.1 Interesting dates in history of Geocaching

- May 3, 2000 Dave Ulmer placed the first container "The original Stash" (GCF)
- May 7, 2000 placement of the cache with the lowest GC code "Mike's First" (GC4)
- May 12, 2000 placement of the first cache out of the USA "First New Zealand" (GC45)

- May 15, 2000 Chile became the third country to join the game -"Geocache" (GC42)
- June 3, 2000 the first cache in Europe was placed in Ireland "Europe's First" (GC43)
- July 7, 2000 the first cache on the European continent was placed in Belgium "Geocache" (GC40)
- March 24, 2001 holding of the first event in the world (Austin, Texas) –
 Austin Geocachers Happy Hour" (GC389)
- June 1, 2001 placement of the first and nowadays still active cache in the Czech Republic – "Tex-Czech" (GCE50)
- September 30, 2001 launching of the first geocoin Moun10Bike Version 1 Geocoin
- March 2002 the first publicly sold geocoin Canadian Geocoin
- 2005 since this year, every geocoin has its own unique code allowing to track it
- February 17, 2007 first Geocoinfest in the world (Temecula, California)
 "GeocoinFest 2007" (GCZ5V8)
- March 8, 2010 1 000 000 published caches in the world
- February 28, 2013 2 000 000 published caches in the world
- August 15-17, 2014 first Giga Event in the world (Munich, Germany) "Project MUNICH2014" (GC4K089)
- September 1-3, 2017 first Giga Event in the Czech Republic "GREAT MORAVIA 2017" (GC6GB1B)[6]

2.3 Groundspeak

Groundspeak Inc. is an American company with the headquarters in Seattle, Washington, which began operating on September 2, 2000. The President and Co-founder of this company is Jeremy Irish. The official mascot of this company and the whole geocaching is Signal the Frog.[7] It operates the largest global website for geocaching (geocaching.com), offers more than two and half million caches, unifies over six million cachers in more than 200 countries in the world and provides the discussion forum on "Groundspeak Forums", web store "Shop Groundspeak",[8] or develops applications. This website has become the official portal of geocaching. There are many unofficial

alternative websites, that have its own, usually simpler rules, but the amount of caches and provided services cannot compare to the official site in any way. Groundspeak has gained de facto a monopoly in this segment. The basic membership is for free, so Groundspeak profits only from premium members, which pay a year or month fees and from products, which are sold on web stores.[9]

2.4 How is the game played?

The basic steps are:

- 1. Register for a free Basic Membership on geocaching.com.[10]
- 2. Go to your profile and click on the map in the section "Search for geocaches" or click on "Play" on the main site and choose "Find a Geocache" or "View Geocache Map."
- 3. Choose a geocache on the map in the location you want or type the GC code or city, if you chose "Find a geocache" and choose one from the list or click on "Map These Geocaches" and choose one from those on the map. You can also enter "Use my home location" or "Use my current location" if you want to search for caches that are nearby.
- 4. Click on the cache (traditional) and enter the coordinates of the geocache into your GPS Device.[11]
- 5. Use your GPS Device that helps you with seeking the hidden geocache.[12]
- 6. When you find it, write the date, time and your nick into the logbook. You can also take something, but remember the rule "take something, leave something".
- 7. Log your find on geocaching.com. You can write your experience, what you took and what you left in the cache and you can also add some photos.

This is the simplest level. If you really want to play it, it is usually much more complicated. There are more types of caches, more ways to put

coordinates into your GPS Device, caches, where it is required to have some special equipment and many other things that will be explained in next chapters.

3 Geocaches

There are many different types and sizes of caches. Nowadays geocaches are very diverse and it is possible to find them nearly anywhere from the deep seas, lakes, caves, over inhospitable Antarctica or deserts, beautiful meadows and forests, cities full of people, to the peaks of mountains. And there is even one cache in space.

3.1 What does a cache looks like

Cache is basically some container, usually a plastic container, which is commonly used for storing food, so called Tupperware, or Lock&Lock box, which is possibly more known term for a Czech geocacher. They are only different brand names of those containers, but both of the terms mean the same, a plastic waterproof container. There are 5 basic sizes of caches:

Micro - less than 100ml. Micro cache is usually a film canister or effervescent tablet container containing typically only logbook or log sheet. To this category belongs also nano cache, which is less than 10ml, usually magnetic and looks like a tiny button.

Small – from 100ml to 1L. Usually a classic plastic container for a snack. Only logbook, pencil and a few small things fit in.

Regular – from 1L to 20L. A plastic container for really big food or ammo box.¹

Large – 20L or larger. For example a chest or a bucket.

Other – Those caches are somehow unusual. The size of the container does not fit into any category. In order to know what to expect, it is necessary to see the cache description in the cache listing.

¹ Ammo box – a type of a cache container, originally created for safe transport and storage of ammunition. They are very sturdy and watertight thanks to the rubber gasket on the lid. (http://wiki.geocaching.cz/wiki/Ammobox)

3.2 What is in a cache

Logbook - Every cache always contains a logbook to log a find. There are many different sizes of logbooks to fit in each cache. You can buy some on geocaching web stores or just buy a classic notebook in some shop. You can also print a log sheet, mostly suitable for micro caches or just put in a sheet of paper.

Pencil - There should be a pencil in a cache, but it is not a rule. There is usually no pencil in micro or Nano caches, because it just does not fit in and therefore there is a notice in listing: "Bring your own pen." In larger caches, there is usually some pen or pencil, but sometimes, it can happen, you find a cache only with a logbook and no pen. They tend to lose, usually by logging, or they are just traded by cachers for something else and therefore it is always better to have one by you.

Muggle card - Another, but also not so common thing is a muggle card. It is the card with main information about geocaching and a geocache for accidental finders.

Trade items – They do not belong to the compulsory content of a cache, but you usually find them in most of the caches. It can be anything you have and fits into the particular cache. The most common things are for example plush toys, small toys for children (cars, small figures of film characters, animals), bracelets, rings, decorative stones, old coins, or those little kinder toys, that are called "kinder trash" by cachers, but children like them. In larger caches you can find also CDs, books, or some more valuable things, such as watch, compass or a nice pen. It is forbidden to put trash into caches and things like knife, explosives, alcohol, drugs and other unsuitable or dangerous things. If you like something, you can take it, but you have to leave something else in the cache.

Trackable items – Sometimes you may come across a probably very nice thing. A coin or a thing with a tag attached to it. Those things are called Geocoin and Travelbug. Each of them has its own code and you cannot keep them. You can only log them, or take them from the cache, log and move to another cache. You will find out more about those things in the third chapter.

3.3 Hiding a geocache

Every member of geocaching can hide a geocache. Before you decide to hide a geocache, it is good to have some experience with finding geocaches of different types and sizes with different terrain and difficulty. It is recommended to learn the rules for cache publishing, which you can find on geocaching.com in article "Geocache Listing Requirements / Guidelines."[13] The translated Czech version is on the Czech Geowikipedia. If you decide to hide a geocache, you have to find a good hiding place in the area, where you want to hide it, then localize it and take down the coordinates. Be careful, there must not be any other cache in the surroundings of 161m. It is always better to check it on geocaching.com in the section "Hide a geocache." Then you prepare the cache. You choose the right size of a container, name it and put the logbook or some things to trade and pencil if it is possible in it. Then you can hide the cache on your chosen place. The last thing you have to do is fill in the listing for your cache on geocaching.com. There is an official form in the section "Hide a geocache", where you fill in the name, coordinates, date of hiding, size, terrain, difficulty, attributes, cache description, hint and waypoints. You find out more about listings in the fourth chapter. Then you can also add some note for the reviewer. If you are satisfied with everything and your cache meets all the rules and requirements, you can send it to approval. If everything is alright, your cache is approved and published by a reviewer. All members of geocaching.com are then able to see the listing of the cache and find it. Since then, you have become the owner of the cache and you are required to maintain it. Anything can happen. The logbook may get wet or full, the container may get damaged or lost, the cache may be repeatedly robbed or stolen. All of those situations are quite common. If some of them occurs, you have to disable the cache for some time, repair it and then enable it again. Sometimes the cache may be archived, usually if it is repeatedly stolen, or the hiding place is not suitable anymore. It may be also adopted by another cacher, usually if the previous one is not able to maintain it anymore.

3.3.1 Reviewers

Reviewers are volunteers that look after the publications of the caches under the authority of Groundspeak. Every reviewer has its own given area, usually part of a state. There are for example 6 reviewers in the Czech Republic, 50 reviewers in Germany or 16 reviewers in Great Britain.[14] They approve and publish the caches. If you submit your cache, reviewer always checks if the cache is not contrary to the geocaching rules. If there is some problem, he usually contacts the owner and discusses it with him. He can also send a betatester that check the situation right on the place. If he finds the cache all right, he publishes it. Also cachers themselves can contact the reviewers and discuss their problems or requirements, before the cache is published and they also often ask cachers in their surroundings, usually friends, if someone helps and does the betatest for the cache. It is common by complicated or long multi caches or mystery caches.

3.4 Geocache types

3.4.1 Traditional Cache

Traditional cache is the original and basic type of caches. If you are a total beginner and you want to find your first cache, this is the one you should look for on the map, but be careful about the difficulty and terrain. The icon is the green geocache. The cache is located on the given coordinates that are written straight in the listing.

3.4.2 Mystery Cache

Mystery caches may sometimes give you very hard time. The icon is the blue question mark and in the listing you find only the starting coordinates, which set only the location of the cache icon on the map. On those coordinates, there is no geocache. You have to solve the coordinates of the final cache. It is necessary to solve some puzzle, that can be seen straight in the listing, or there may be quite common sentence: "You find the cache coordinates in the listing."

Then you have to read the listing, be observant and a bit creative and solve the coordinates. By most of mystery caches, there is a coordinate checker, so it is possible to confirm the correctness of your solved or calculated coordinates. It is also good to see the cache difficulty. Mystery caches may be really easy, so you have got them solved in minutes or even children are able to solve them. They may be more difficult, so you have to spend some time with solving, until you get the right coordinates, or there may be really hard ones, which you spend days and nights by, solving lasts weeks, months, sometimes even years and sometimes you have to just ask the owner or another cacher for help to be able to solve it. Many cachers, who own new and unique or somehow special cache, which they do not want to be destroyed or stolen, use this and do their cache as a mystery cache, not only traditional, so that only a few people would be able to solve the coordinates and find it. Mystery caches may be also similar to multi caches. There may be coordinates of the first stage in the listing, or the instructions in the listing may say: "On the starting coordinates you find..." So you are required to go to that coordinates without any solving at home and find, what you need, according to the instructions in the listing. It is usually a cache, where you find some puzzle that you have to solve right at the place to get the coordinates of the next stage and so on, until you get the coordinates of the final cache. Everything take place outdoors, so it is always good to start in time, so that you have enough time for solving, which can take more than hour at some stages by more complicated mysteries and also for moving between the individual stages and looking for them. In case you are not able to manage it for any reason, of course you can stop, go home and come back later. And always remember to read the listing, the owner usually writes the approximate time you will need for it, or some tips or hints. There may be also a combination of those two mystery cache types. That means you have to solve the coordinates of the first stage at home and then you continue outdoors.

3.4.3 Multi Cache

Multi caches are often confused with mystery caches. The difference is that you do not solve anything, the coordinates of the first stage are always given, you find them written in the listing. At the stages, you do not solve any puzzle, but usually count something. The icon is two yellow/orange caches. Multi cache has got always one or more stages that may be virtual or physical and there are also two types of multi caches. All the information and instructions about what to do or where to go you find in the listing of the particular cache. By the first one, you have got the coordinates only of the first stage. You have to go to the first stage and find a cache, usually micro or small size, where you find the coordinates of the next stage, or the instructions, how to calculate them. By some multi caches, you are required to find some particular object at the first stage, usually trees or windows of some house and you have to count them and note the numbers. Very common are also signposts or information boards, which you have to find particular numbers on and also note them. In the end you substitute the letters in the formula with the particular numbers you have noted, calculate the coordinates of the final cache and you can go and find it. By the second type of multi cache, you have got the coordinates of all the stages given. You find them written in the listing along with the instructions, what to do or count at each stage. All you have to do is visit all the stages, note all the numbers you count at each of them and then again substitute the letters in the formula with the particular numbers you have noted, calculate the coordinates of the final cache and you can go and seek. Again, read the whole listing carefully, start in time and be prepared for everything. Multi caches may have only one, or for example three stages, but there are also multi caches with for example nine stages that may be over 10 km long.

3.4.4 Earth Cache

Earth caches have got no physical container. Its icon is the cut out planet Earth and its purpose is to educate in the field of geology. They bring you to interesting places outdoors, to show you some unique feature of the Earth. Cachers who visit Earth caches can see how our planet has been shaped by geological processes, how we manage its resources and how scientists gather evidence.[15] Earth caches are also usually made on places, where the physical container is not possible or even forbidden to hide (some nature preserves), or where the previous physical container had been repeatedly stolen, so it rather got archived, but the place really deserves a cache. The most common are for example glaciers, unique rocks, minerals, geological formations made by erosion, weathering, deposition, volcanic activity or glacial action, waterfalls, craters, caves, moors, quarries, gorges and so on. The coordinates of the place are always written in the listing and you are required to answer some questions to be able to log the cache. On those places, there are usually info boards for tourists, so all you have to do is read the questions in the listing, find the answers on those boards and send them to the owner of the cache per e-mail. Sometimes they are pretty easy, sometimes they may be a little bit tricky. If your answers are right, you are allowed to log the cache. If not, do not worry, the owner will send you back an e-mail with the right answers and then you are still allowed to log it. The main goal is that you learned something about the place and tried to answer those questions. Sometimes you are also required to take a photo of you and your GPS device at that place, as evidence that you have been there, and add it to your log.

3.4.5 Letterbox Hybrid

"Letterbox hybrids are based on an older kind of container search, called letterboxing. Because letterboxing began in 1854, before GPS existed, the finder follows written instructions to discover the container." [16] The icon is the white envelope. In the listing you find the starting coordinates and a description of the way to the final cache. Beside the description you may find there also pictures, which helps with orientation during your way to cache. Some letterboxes use even only the pictures that you follow to find the cache. In most of the final caches of letterboxes you find a stamp besides the common content of a cache,

which you can stamp to your notebook to record your visit. The stamp must remain in the cache, it is not for trade.

3.4.6 Event Cache

Event caches are no physical geocaches, they are just events. The icon is the white speech balloon with two red lines inside. They are gatherings of geocachers that are used for meeting new cachers, exchanging experience, exchanging CWGs, logging Travelbugs and Geocoins or discussing and telling stories and experiences by seeking caches. They are held by geocachers, individuals or groups of cachers, if it is a bigger event, so as the caches. There are coordinates of the venue, a date, time and the description of the event in the listing. You have to register as "Will Attend", during and after the event you can log it as "Attended". Then the event is usually disabled, but participants are able to still log it and after a few days it is archived. Events have got different themes. It can be collective hike to some particular place, for example a hill or observation tower. It can be gathering in a restaurant for local geocachers that may repeat every month. It may be commentated tour of a castle, observatory, zoo, brewery or other things. Those tour events have got usually limited capacity, so be careful and register in time, some events are full in minutes. It can be also gathering of some particular groups, for example cachers of Pilsen, cachers with geodogs, cachers that own a trackable car and so on. Events are often held on special or significant days, such as for example Halloween, Leap Day, New Year's Eve and so on, or on days, that are important only among geocachers, such as for example International Geocaching Day, International EarthCache Day and other. On those days the events are held all over the world and geocachers can also earn a virtual souvenir made by Groundspeak for those days. Team Podcaster from Southern California also came up with an idea of World Wide Flash Mobs in 2007. Every year there are WWFM events held all over the world at the same day and mostly at the same time. Participants take collective photos at those places. The photos or videos are then placed on the common website, so that everyone can see them. Different number of countries participates every year. Up to now 80 countries have been participated WWFM. There are also different types of events. Each of it has its own unique icon.

3.4.7 Mega-Event Cache

Mega event is an event attended by 500 and more people. The icon is the white speech balloon with the red word mega in it. Mega and Giga Events are actually traditional events with the classic icon. When they reach the relevant number of "Will Attend" logs, they become Mega or Giga event and gain the relevant icon. It is not automatic, the status is determined by Groundspeak. During holding of the main Mega event, there are usually accompanying events held in surroundings. Mega events are attended by many people from all over the world and they may last several days, usually three days. It is common, that there is information in more languages in listings and there is usually a separate website made for the particular Mega event. Some Mega events are also held annually, such as for example "Geocoinfest (GCF)." Geocoinfest is the international Mega event relating mainly to geocoins. There is a geocoin exhibition, where you can see some of the most interesting or unique geocoins. There are many sellers promoting their web stores and offering many geocoins, travelbugs, gear and other things related to geocaching to buy right on the place. The part of this event is also meeting new geocachers from your or another countries, discussing, showing your own geocoins or travelbugs, sharing experiences or exchanging experience. The first Geocoinfest was held in 2007 in Temecula, California. Since this year there has been one Geocoinfest held every year in different city. Pittsburg, PA (2008), Salt Lake City, UT (2009), Minneapolis/St. Paul, MN (2010), Rock Hill, SC (2011), Denver, CO (2012), Las Vegas, NV (2013), Houston, TX (2014), Omaha, NE (2015), St. Louis, MO (2016) and Long Beach, CA (2017).[17] Since 2011 there have been Geocoinfests held in Europe too. The first Geocoinfest Europe was held in 2011 in Köln, Germany. The other also followed every year. Lisbon, Portugal (2012), Prague, Czech Republic (2013), Ulm, Germany (2014), Eindhoven, Netherlands (2015), Berchtesgaden, Germany (2016) and Aarschot, Belgium (2017).

3.4.8 Giga-Event Cache

Giga event is an event attended by 5000 and more people. The icon is the red speech balloon with the white word "giga" in it. Groundspeak can make an exception and so the first four Giga events have gotten this icon already by 3000 "Will Attend" logs. Since January 13, 2017, the official rules changed and now every Mega event must reach 3000 "Will Attend" logs to be able to apply for the Giga status by Groundspeak. "This number reflects an event's high probability to attract 5000+ Attended logs during the event."[18] Giga event is the same event as Mega event, but much bigger. Giga events also last usually three days, there are many other accompanying events held in surroundings, many activities are organized or many new caches are made up. They are very attractive for many cachers from all over the world, so as the Mega events, but they are also very rare, due to the required number of "Will Attend" logs. The first Giga Event was held in 2014 in Munich, Germany. Since then three other Giga events were held, also in Germany. Two of them in 2015 and one of them in 2016. On January 25, 2017, the Mega event "Great Moravia 2017" qualified for Giga event and became the fifth Giga event in the world and the first Giga event held in the Czech Republic. This event takes place 1.-3.9.2017 in Plumlov, Czech Republic.

3.4.9 Cache In Trash Out Event (CITO)

CITO event is a special event of which aim is to clean up and preserve the natural areas that we enjoy while geocaching.[19] The icon is the blue and green circle with the geocaching figure, the symbol for recycling and the name "Cache in trash out" in it. It is a gathering of geocachers that try to clean up litter in some particular area, such as park, beach or a part of forest.

3.4.10 GPS Adventures Maze Exhibit

GPS Maze is a special type of event. It is a travelling educational exhibition designed to teach people of all ages about GPS technology and geocaching. The icon is Signal the Frog flying on the Earth. The concept was initiated by Geocaching HQ and Minotaur Mazes.[20] The United States version

of the GPS Adventures Maze traveled to 16 locations across the country for 7 years. In late 2014, this special geocaching exhibit ended in the United States."[21] The Czech Geocaching Association (ČAGeo) was inspired by this concept to create a similar traveling exhibition – ČAGeo's Flying Circus. Since September 2012 the exhibition visited five regions of the Czech Republic. In 2013 ČAGeo in cooperation with Groundspeak created a fully new concept -GPS Maze Europe, which combines the best from the North American GPS Maze and the Flying Circus events.[22] This current exhibit travels to one Mega/Giga-Event per year.[23] The first GPS Maze Europe was presented on September 6, 2013 on the Mega event "Geocoinfest Europe 2013 - Prague" in Prague, Czech Republic. This first GPS Maze Europe was logged by 3763 nicks, which made this event the most visited geocaching event in the world.[24] The next GPS Maze events were held in Germany in 2015 and in the United Kingdom in 2016. The event in 2014 was supposed to be held in Slovakia, but it was cancelled. The GPS Maze Europe for 2017 is going to be held in the Czech Republic again, along with the Giga Event "Great Moravia 2017."

3.5 Special events

3.5.1 Geocaching International Film Festival (GIFF)

Every year there are events held at the same days all over the world, where short films made by geocachers are screened. These events do not have its own icon, but geocachers can get a special virtual souvenir for it by attending one of the GIFF events. The first Geocaching International Film Festival worldwide events were held in 2013. Every year any geocacher can shoot a short film including geocaching themes, such as seeking a cache, problems of geocaching, meeting new friends, geocoins, travelbugs and many other and submit the film according to the rules on the special website "geocachingfilmfestival.com." It should be creative or funny. Then all the submissions are judged by Geocaching HQ. They choose approximately 16 of them and share them outside of Geocaching HQ with selected geocaching community volunteers from around the world. The volunteers view the finalist

films and choose an overall winner. Geocachers may then apply for holding the events, where the finalist films are screened.[25] The films are then uploaded on YouTube, so that any geocacher could see them.

3.5.2 Wherigo™ Cache

Wherigo is a special type of cache, where you play a game on your mobile phone, while moving outdoors in the real world at the same time. The icon is the blue circle with a white arrow inside it. You have to download an application and upload so called "cartridge," which you find in the listing, to your mobile phone. Then get to the starting coordinates written in the listing and run the game. After that, you act according to the scenario and fulfil different tasks. You may be required to go or run somewhere and pick a virtual item, which you bring to some virtual person or use somehow. You may be also asked some question you have to answer. At the end you get the coordinates of the final physical cache.

3.5.3 Geocaching HQ Geocache

There is only one geocache with this icon in the world. "Geocaching Headquarters" cache is located in the Visitor Center at Geocaching HQ in Seattle, Washington and it is available only while the Visitor Center is open. More information and the opening hours are written in the listing. The icon is the green Water Lily leaf with the yellow letters HQ inside it.

3.5.4 Lab Caches

This type of a cache is quite new. The icon is the laboratory flask with green liquid inside it. Lab caches are rare. They appear only during the holding of a Mega/Giga event and the principle of hunting is the same as by the traditional caches. The only difference is that you have to find a code inside the cache, which you need to be able to log the cache. Lab caches are made as an additional entertainment during the Mega/Giga events and they are available for finding only from the start to the end of the event. That means that they are

only temporary, made only for the event. They are removed after the end of an event. They have got no listings on geocaching.com, but there has been made a separate website for it, "labs.geocaching.com," where you can find all the information about the particular lab caches.

3.6 Other geocache types

Those caches do not have their own unique icon, they are just somehow special and come under the classical types of caches.

3.6.1 Night and UV caches

Night or UV caches can be mystery or multi caches. These caches have got "Night cache" or "UV light required" attributes in their listings. Night cache can be found only at night. There are usually some reflectors attached to trees that you must follow with the use of flashlight. It is the same principle as by mystery or multi caches. You go stage by stage and at the end there is a physical geocache. The only difference is that you must hunt at night.

3.6.2 Beacon caches

In geocaching, a beacon is a device that transmits a wireless message, such as the whole coordinates, a part of them, or just something that helps you to find a cache. Beacon devices are for example NFC transmitter, $Chirp^{TM^2}$, WiFi Router, Radio transmitter.[26] Beacon caches must have the attribute "Wireless Beacon" in their listings and they can be mystery, multi or traditional caches.

3.6.3 Bonus caches

Bonus caches are signified as a mystery caches. Some geocachers create series of caches, usually traditional caches, but they may also be mystery or multi caches. In each of those caches there is a number. After finding all the

² Chirp™ - it is a wireless device, which was launched by Garmin company. This device communicates with some models of navigation devices with the help of radio signal. Chirp transmits the signal and the navigation device can get the information for finding the cache from it. (http://wiki.geocaching.cz/wiki/Chirp)

caches in some series, you substitute the numbers for letters in a formula written in the listing of the bonus cache and calculate the final coordinates of the bonus cache. Sometimes you may know the coordinates of the bonus cache, but you need a numeric code of the lock to be able to open the cache. You also get the part of the code in each of the cache in the series. It does not have to be always numbers, but it can be also some easy cipher. Every bonus cache may be a bit different, so as the mystery caches. All the information you need you find in the bonus cache listing.

3.7 Grandfathered cache types

These geocache types are still available to find, but they are not available for creation on geocaching.com anymore.[27]

3.7.1 Virtual Cache

Virtual cache has got no physical container. The icon is the white ghost with the red mouth. It is something similar to Earth cache. The difference is that you have to find out some information on the given coordinates and send it to the owner per e-mail. For example some date, names, etc. You are usually also required to take a photo of you with the GPS device on that place.

3.7.2 Webcam Cache

Webcam cache is a special type of virtual cache. The icon is the webcam. These are geocaches that use existing web cameras that monitor various areas like parks, squares and other. The idea is to get yourself in front of the camera according to the instructions in the listing and save a screen capture from the website where the camera is displayed in order to log a find.[28]

3.7.3 Project A.P.E. Cache

The icon is the green box with the letters APE on it. In 2001 this icon got 12 geocaches that were placed in cooperation with 20th Century Fox to support the movie Planet of the Apes. Each of those caches represented a fictional story

and they were made using specially marked ammo containers and contained an original prop from the movie.[29]

3.7.4 10 Years! Event Cache

The icon is the square in colours of geocaching with the number 10 in the yellow one. It is a special Event cache type for events held April 30 - May 3, 2010 to celebrate 10 years of geocaching.[30]

3.7.5 Locationless (Reverse) Cache

A traditional cache could be considered as opposite of Reverse Cache. Instead of seeking a container, you find some specific object, locate it and log its coordinates.[31] The icon is the planet Earth with a flag on top of it.

3.8 GeoTours

GeoTours connect tourism and geocaching. These GeoTours are collections of caches designed to introduce you to new locations. They are usually made by organizations that want to promote their areas. The collections of geocaches guide visitors through the regions in some interactive way. GeoTours can guide you through historic sites, national parks, they can be along some hiking trails or even in the middle of a city. They are usually series of traditional or mystery caches with a bonus cache at the end. You find them on "geocaching.com." You click the "Play" and choose "GeoTours." There you can find a map and the list of all GeoTours around the world. These caches are unique, some of them are very well made. In the listings you can find a lot of information about the area and each place that each cache from the series may represent. Some areas provide special promote materials to the GeoTours, such as maps, leaflets, tips for trips and other. On some GeoTours you may get a special geocoin made for the particular GeoTour as a reward after you complete the whole GeoTour. These GeoTours are usually very attractive for geocachers. Thanks to this fact, more geocachers get to know about those destinations and travel there only because of these GeoTours. There is also one GeoTour in the

Czech republic, "Prague Airport Geotour," which was designed to show you the Václav Havel airport in Prague.

3.9 Interesting caches

Nowadays geocaches are not only ordinary plastic containers. Geocachers has become much more creative and create many unique, technical and often very sophisticated caches. Geocaches may look anyhow and may be hidden nearly anywhere. Some of them may look like a stone, an animal, a cone, or even a chewing gum or a bolt. These named containers are also available to buy on geocaching web stores. But geocachers are sometimes creative themselves and create their own unique containers, usually somehow thematic made for their cache. Some of the caches contain some technical mechanism, so that geocacher must use batteries, coins, pencil, UV light, water, magnet or other things. Some of them may hang on the tree, some are hidden inside the fake electric closet. Large caches are usually chests hidden straight in some public object, such as information centre, reception desk, restaurant, museum, library and so on. Sometimes you must ask for the cache at the particular object, using some password. Nest boxes on trees are also very popular and common especially in the Czech Republic. Some of the caches are really large, such as a large cache placed in Washington, US that is bigger than human and looks like a large ammo box. Or a big green truck located in Bretagne, France. You can literally walk inside the cache. There is also one cache in space. The only space cache is located aboard the International Space Station (ISS) and has been logged only once by an American astronaut Rick Mastracchio.

Some geocachers create very long series of caches, usually traditional caches that are placed along some hiking trail. These series of caches are called "powertrail." They can be really long, so that you have to plan everything in advance and be prepared for anything. You may divide it into more parts and hunt a part of it every day. Sometimes a use of train or a bus could be very useful and it is also often recommended in the listings of those caches.

Another interesting thing is creating series of geocaches that create big patterns on the map. It is called "Geo-Art." They may look like an animal, an airplane, a train, it can be a symbol or a word, anything that comes to your mind. The patterns are usually made in shapes that thematically match the caches, but it is not necessary.

4 Trackable items

During your hunting or on an event you may find or see a trackable item. These items travel from cache to cache and each of them has its own unique code. Each trackable item is owned by a geocacher that has launched it to the world. If you have a new trackable item, you have to activate the code on geocaching.com and create a page for it, so as the listings are created for caches. Geocachers usually write the name, where is it from, its purpose and they sometimes add a photo. Then they put it to some cache and the other finder can take it and move it to another cache. It is also possible to give it to another cacher, who puts it to another cache and so on. Some of the trackable items have its own goal, for example travel to each state of America, or travel to some specific location a then go back, or travel only to caches that are near to water and other. Some trackables travel with their owners, who log its journey themselves. These are usually some unique, personal, or very expensive ones, which a geocacher does not want to lose. If you find a trackable item, you can log it so as a cache. Go to geocaching.com, then click "Play," then "Find trackables" and then type the code of the trackable you have found. Then you see the page of the trackable, where you can read all the information, see how many kilometers it has already traveled and other. Then click "Found it? Log it!" and you can log. If you take it from the cache, you must log as "Retrieve it from the cache." If you take it from another cacher, you must log it as "Grab it from current holder." If it belongs to another cacher or you do not want to take it from a cache, but only log it, you must log it as "Discovered it." If you put a trackable into a cache, you can log it while you logging the cache. You just have to choose the right one and click "Dropped off". There are two main types of trackables; travelbug and geocoin, but nowadays you may also see a trackable car, a dog or a T-shirt.

4.1 Travelbugs

Travelbug is a thing with an attached tag that has a unique code engraved on it. The tag with this code is available to buy on any geocaching web store. The classical tag has a typical bug engraved on it, but there are many other types of the tags these days. You can make a travelbug from nearly anything. It can be a small figure, a plush toy, a pendant and other.

4.2 Geocoins

Geocoins are big coins with some pictures or words and a unique code engraved on it. They are usually made for some special days, events, or they symbolise something. There are for example historical coins, coins with animals, coins for national parks, coins that symbolise some activities or groups, coins with movie themes and many other. Geocoins are available to buy on any geocaching web store.

4.3 Other trackable items

These days there are many other things where you can find a trackable code. Geocachers have trackable T-Shirts, bags or jewellery. You can buy a sticker for your car or a tag that you attach to your dog's collar. These travelbugs do not travel from cache to cache of course, but they travel with the geocacher and other cachers can log them as "discovered."

4.4 Interesting Travelbugs and Geocoins

You can find really unique pieces among all the travelbugs and geocoins. Some geocoins can be really big, well worked-out, parts of them can be moving. Those ones are usually really expensive and geocachers do not launch them to the world. They can be seen usually on events. Geocachers also make Travelbug Hotels. These are caches, usually traditional that are meant to be only for

exchanging travelbugs and coins. Travelbug Hotels are usually placed along the highways or at the airports.

5 Listing and profile

5.1 Listing

A listing is an important part of every cache. There is all important information about the place and about the cache. In this chapter we look at what should be in the listing.

On top there is a name of the cache and the relevant icon of the type of the cache. Then there is a name of the owner of the cache and the date of hiding. There you can also see the number of favorite points, which are marked by blue hearts. The points are given by cachers, if they really like the cache. The other cachers know then that it is probably a really good one, or unique one, which is worth for visiting. Then there comes one of the most important parts of a cache listings and that is the "Difficulty" and "Terrain."

5.1.1 Terrain and Difficulty

The terrain and difficulty ratings are marked on a 5-star scale. The difficulty rating shows how difficult is to solve a mystery cache, or to find a cache outdoors. Caches with one or two stars are usually easy to find or solve. Mystery caches with 3 and more stars may be sometimes really hard or tricky to solve. A mystery cache with a five-star rating may take really long time to solve.

The terrain rating shows how hard the terrain will be, in other words, how much of physical effort is needed to get to the cache. The one and two star rating means that the hike is usually less than 1km long, the terrain is flat and it is usually wheelchair accessible. The three star rating means that the hike may be longer with varied terrain. By the four-star rating there may be a really hard terrain, which can be very strenuous. Sometimes there is swimming or climbing a tree required. The hardest is of course the terrain with the five-star rating.

Finding of those caches may require some specialized equipment such as scuba gear, a boat, rock climbing gear, or similar.[32]

5.1.2 Attributes

Attributes shows what to expect at the cache location, what you need to be able to find a cache, or what people is the cache suitable for. The attributes are divided into 6 groups:

- **1. Permissions (Allowed/Not Allowed)** There you can find all things that you can or cannot do or bring to the cache coordinates. The attributes are for example dogs, bicycles, horses or campfires.
- **2. Equipment (Required/Not Required)** There you can find attributes such as for example climbing gear, boat, scuba gear, flashlight required, or tree climbing.
- **3. Conditions (Yes/No)** There you can find all attributes that shows what to expect. For example length of the hike (less than 1km, more than 10km), a cache accessibility (night cache, 24/7, available during winter) and many other such as for example recommended for kids, scenic view, may require wading or swimming.
- **4. Hazards (Present/Not Present)** There you can find all attributes that points out all the potential danger. For example dangerous animals (snakes), ticks, cliff/falling rocks, hunting, dangerous areas, or thorns.
- **5. Facilities (Yes/No)** These attributes shows what you can find in the surroundings of a cache. For example food nearby, picnic tables nearby, telephone nearby, public restrooms nearby, drinking water nearby, parking available, fuel nearby and also wheelchair accessible and stroller accessible attributes belong here.
- **6. Specials (Yes/No)** These are very rare attributes that appear only by some special caches. For example GeoTour Cache attribute belongs here.

5.1.3 Geocache Description

In this section you can find everything you need to know about a cache. There is usually information about the location, such as for example history, unique features in the nature, interesting things and other. Then there is a description of the container itself. Where it is hidden, how big the cache is, what equipment you need, what to be careful of, what to do and what not to do, the description of the way to the cache and other. The text is often complemented by pictures.

At the end there is a hint, which specifies the cache hiding place and help a cacher with finding if needed. For example "under the big stone," "under the stamp, covered with moss," "at the end of the railing" and other. It is always only up to the cacher if he reads it or not.

There may be also a list of some additional waypoints on the map with coordinates, such as parking lot, view point, some interesting thing or a crossroad.

5.1.4 Cache logs

At the very end of the listing there you can see all the logs from cachers to the cache. When you find it, you can log "Found it," when not than you can log "Did not find." It is very important to log everything, because only then the owner and other cachers will know at what condition the cache is, if it needs some maintenance, if it is possible to find it or if the cache got lost. The long stories, recommendations or pictures from your hunting in the logs may be also helpful for some other cachers.

5.2 Profile

On your personal geocaching profile you can see many useful things. There are the numbers of your finds and hides. There is a list of your found caches and visited events, a list of your logged travelbugs and geocoins, a list of your own hidden caches and a list of your own travelbugs and geocoins. There is

also a list of the travelbugs and coins that you are currently having by yourself, but will move them to another cache.

You can find there your list of souvenirs. These souvenirs are virtual and they are created by Groudspeak for some special days, events or occasions, such as for example 15 years of geocaching, Geocoinfests, Halloween, International Geocaching Day, Leap Day and other. There are also souvenirs that represent individual states or parts of them, such as for example Norway, Austria, Germany, Bayern and so one. You can get a souvenir by finding a cache or attending an event on that particular day or by finding a cache in that particular state.

There are also some statistics on each profile that shows the amount of caches found per month or per year, which types of caches and containers you find at most, or the nearest or the farthest cache you have found and other.

A part of each profile is also the gallery. There you can find all the pictures that you have added to your cache logs. Other cachers can see it.

6 Equipment

Every geocacher should be prepared for anything and have some basic equipment with himself, even when he is not on a hunt right at the moment. Some unexpected situations may occur. You may meet another cacher that wants to help or change some travelbugs. There may appear a new cache while you are in a terrain. There is nothing worse than an unprepared geocacher.

6.1 Basic equipment

- GPS device To be able to geocache you need a GPS device. It can be a classic GPS from Garmin, probably the most common mark among cachers, or you can use just your mobile phone, you just have to install the relevant application. The most common is probably Locus Map application.
- **Pencil** Every cacher should have at least one pencil by himself, in case there is no pencil in a cache.

- **Smartphone** Even if you use a Garmin GPS, you should have your smartphone with yourself, which probably every person has anyway. Apart from the fact that you can use your phone to call anyone for help or for an emergency if something happens, it is a big advantage to have a camera and something to write on for a cacher. There might by something you need to take a photo of, to be able to read it or see it later. Or there might be something that you need to note.
- Pocket knife/scissors There may occur some situation while you are hunting, where you will need to use a pocket knife or scissors, especially by micro caches. This may be a very practical tool.
- Flashlight Another practical thing. Sometimes you just need to use the flashlight during your hunting, even if it is not a night cache. It is also good to have a flashlight when you do not manage to get back home at daylight.

7 Geocaching in the Czech Republic

According to many statistics, some geocachers' statements and my own experience, geocaching is a very popular activity in the Czech Republic. It is said that the Czech Republic is one of the best destinations for geocaching and that Czech geocachers create one of the best geocaches. According to my own experience I agree with this statement. There are many really amazing and well-worked caches made by experienced cachers. Of course there are many unique caches all over the world, but I would say that there is a really broad variety of those unique caches in the Czech Republic.

There is a separate website for the geocaching in the Czech Republic "geocaching.cz" There you can find anything about the geocaching in the Czech Republic. There are many interesting articles, discussion forum, some projects, the list of events held in the Czech republic and there is also the "GeoWiki" where you can find the rules and many other things you want to know about the geocaching in the Czech language. There are also links on the regional websites of the individual Czech communities, such as "Geocaching Plzeň," Geocaching na jihu Čech," "GeoOlomouc" and other.

The Czech geocaching has also its own symbol. The logo of the Czech geocaching is the lizard. Few years ago, there were GPS devices named "geko" used by geocachers and there has come the idea of our Czech lizard that symbolizes the Czech nature, forests, rocks.[33] The lizard was then put to the logo of the Czech geocaching. Nowadays you can also buy a trackable travelbug tag, where is our Czech lizard instead of the classical bug, so as on the original travelbug tags. There are also trackable stickers for cars or trackable cloth badges on T-shirts that you can also buy on webstores. It functions in the same way as the classical trackables, the other cachers only know that you are a Czech geocacher.

7.1 Česká asociace geocachingu (ČAGeo)

ČAGeo is a non-profit association. The first idea came in 2011 and the first meeting of 9 Czech cachers that wanted to found this organization was in January 2012. The geocachers debated all the main goals of this association and also other cachers from the Czech Republic were approached. The final meeting was organized on March 3, 2012 in Nový Vestec. There were 15 founding members including one of the Czech reviewers. Since this day the organization has de facto started.[34] Some of the goals and functions of this association are for example nature conservation, historical sights conservation, the communication with Groundspeak, reviewers, individual geocachers, geocommunities and the communication with offices, police, media and other.[35] A very important thing is also creating the "GPS Maze Europe" with the cooperation of Groundspeak. The logo of ČAGeo is the triangle assembled from three shapes. Each of them is in one colour of the flag of the Czech Republic. There is a black hand imprinted in each of them.

7.2 Czech Wood Geocoins (CWG)

CWG is an abbreviation for the Czech Wood Geocoin. CWGs are small wooden circles. On one side there is a nick of some geocacher and a picture burned on it and on the other side there is the logo of Groundspeak and the

relevant year of production burned on it. CWGs are something like a personal calling card of a geocacher.[36] Geocachers that have their own CWGs can exchange them for other ones straight with other cachers, or if they find some in a cache, they can take some from it, but they have to also put the same amount they took out, inside the cache. It is just the same rule as by exchanging things in caches. If you take something, leave something. By the CWGs, it is only necessary to exchange exactly one for another one. You cannot put some completely different thing inside it, if you take a CWG. There are also limited editions of CWGs made only for some events, or as a reward by some series of geocaches.

The Czech geocachers JPAgeo and Poník came up with this idea in spring 2005.[37] It has spread across the whole Czech Republic and very soon nearly everyone had its own CWG. Some geocachers exchange CWGs only occasionally, but many of them are really enthusiastic about it and collect them as an additional hobby to geocaching. Their collections often reach really large amounts of these circles.

Throughout the years CWGs have spread also to other countries such as Slovakia, Germany, Austria and other countries, although it is not so popular in these countries. The biggest popularity have these small circles still in the Czech Republic.

7.3 Stratocaching

Stratocaching is a scientific experiment as well as an adventurous game for the public. It is a combination of two popular activities: geocaching and stratospheric balloon flying. This experiment was organized by people from the Czech citizens association "Žádná věda." Some of these people are also active geocachers.[38]

There were two experiments organized. The very first one was on November 16, 2013 and the second one on October 25, 2014. There was a special balloon called "Dropion" launched to the stratosphere from the

meteorological station Praha-Libuš. There were many cameras attached to the balloon that were supposed to film the whole process; the whole journey of the balloon to the stratosphere and then back to the earth. The balloon had also a special basket that carried special flying capsules in the shape of maple seeds with a GPS tracker. These seeds are called "Stratocaches" and they were released from the basket in the height of 30 kilometers. They flew back to the ground and rotated exactly just like the real maple seeds. In that moment, the geolocating game started on the ground for people who participated. They were supposed to locate these seeds with the help of an application on their mobile phones a then after the fall of the seeds they were supposed to find them on the ground.[39]

Stratocaching is an original project sponsored by for example "Talentcentrum Laborky," "Technet," "ČVUT," "Netrex," "ČHMÚ," "ESET" and other. In 2013 there were over 13000 people participating in this game and 220000 viewers were watching the live streaming video from the balloon.[40] The video recording from both flights is still available to watch on "YouTube" and you can find more information about this project on the website "stratocaching.idnes.cz" or "zadnaveda.cz."

8 Popularity of geocaching

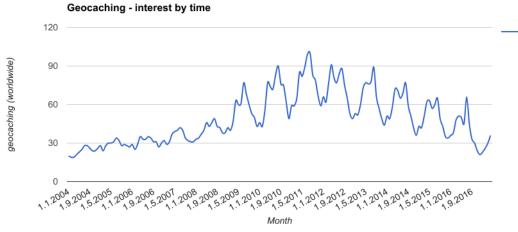
I think that geocaching has become a very popular activity over the years of its existence. At first only the real GPS enthusiasts and usually people who love to spend their time outdoors were geocaching. As the time passed, geocaching has been improving. There have appeared many new things, such as geocoins, some gear for geocachers, applications have improved, the official website has been improving. You can come across geocaching nearly anywhere these days, also in the media. Thanks to that, more and more people are curious about it and have started geocaching.

8.1 Interest in geocaching

I have made some research to show how much interested are people in geocaching. If someone hear something for the first time, he usually use google to search more information about it, so I used the "Google Trends" to find out, how much is the word "geocaching" searched. In the following subchapters, we will focus on the interest in geocaching in more detail below.

8.1.1 Geocaching - interest by time

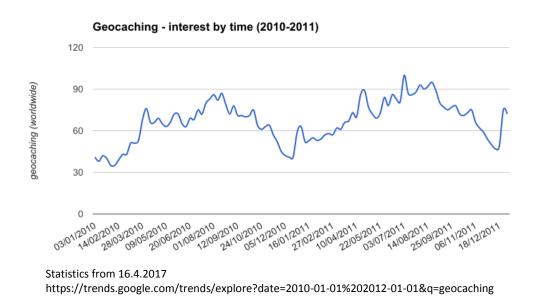
The first graph shows the interest in geocaching in a definite period of time, concretely from January 2004 up to the present (April 2017). The number 100 represents the highest popularity of the expression. The number 50 means that the expression had only half popularity.



Statistics from 16.4.2017 https://trends.google.com/trends/explore?date=all&q=geocaching

We can see that until 2007 the interest was quite low. Geocaching was still developing in that time and only a few people knew about it. Since 2007/2008 the interest has been slowly growing. The biggest increase in interest came between the years 2008 and 2009. The biggest interest in geocaching was in 2011, exactly in summer 2011. Since then, the interest has been slowly going down, although the interest in summer 2015 and 2016 is quite the same.

We can see that the interest is always much higher during the spring and summer than during the winter. This can be seen much better on the second graph.



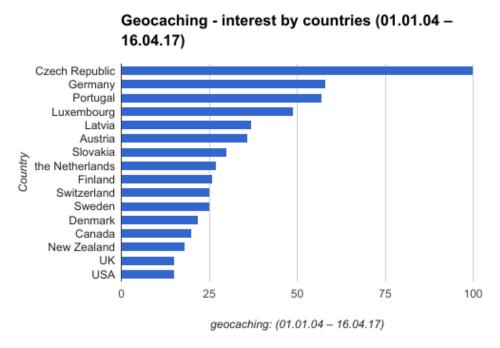
This graph shows the interest in geocaching during two years; 2010 and 2011. We can see that the interest increases every year in spring, exactly during March and April. That may be because of the fact that it gets warmer, people spend more time on a walk outside and there are also spring and Easter holidays in these two months, so many people have more free time, go on a vacation and so on. Before the summer the interest is quite stable or slightly increasing.

The biggest increase comes in July, probably because of the summer holidays. The biggest interest in geocaching is in august according to the graph. It is not very surprising for me. Summer is usually the best time for doing geocaching. People go on holiday and they are probably looking for a new ways of spending their free time. So it is a perfect time for people who have just been introduced to geocaching and want to try it. Even if I look at my statistics on my profile, I can see that we have the most caches found exactly during July and August.

Since the end of the summer holidays, when most people are probably coming back home and go to work again, the interest is gradually decreasing until December and January, when the interest is the lowest. It is probably because of the winter. Not many people probably spend their time outside looking for caches during the winter, most of them probably go skiing. Even I do not geocache much during the winter. Many geocaches are also disabled during the winter, because of the snow and it is also not very pleasant if your hands are freezing during seeking a cache and logging into the logbook.

8.1.2 Geocaching – interest by countries

The next graph shows, how big the interest in geocaching in some countries in the world is. The number 100 represents the highest popularity of the word "geocaching", the number 50 only half popularity.



https://trends.google.com/trends/explore?date=all&q=geocaching

We can see that the Czech Republic is surprisingly on the first place. The interest in geocaching is the highest. Considering all of the facts, this is not overly surprising. It is said that the Czech Republic is an outdoor nation. Many people go for a walk to forests with their families, hike in the mountains, spend their free time at their cottage in the middle of nature. And the Czech Republic

itself offers so many opportunities where and how to spend the free time. We have many beautiful forests, national parks, castles, towns and many other places you can explore. And all these places are full of geocaches. The Czech Republic has been repeatedly placing on the front places in many geocaching worldwide statistics, regarding for example the amount of geocaches.

The Czech Republic is followed by Germany and Portugal. This is also not so surprising, according to my opinion. These two countries have also been placing repeatedly on the first places in many statistics and also some geocachers on the geocaching discussion forums are recommending these countries along with the Czech Republic as the best for geocaching. There are probably many beautiful places, not only in countryside, but also the towns that are full of caches and are worth visiting.

More surprising is the number in the USA, although these numbers show only how much the expression "geocaching" is searched and not the real number of geocaches or geocachers. Then the USA would be probably on the first place.

9 Geocaching statistics

"There are approximately 3 million active geocachers worldwide, with more than 830,000 active users in the U.S., more than 375,000 in Germany and more than 160,000 in the United Kingdom."[41] There are more than 2.8 million geocaches hidden in 184 countries of 193.[42][43] These numbers are only approximate, because they are slightly different each year. There are geocaches that go to archive, but there are also many new ones instead of it. And also geocachers are different. Some of them geocache regularly, some of them stop after some time. In this chapter, I would like to show you some statistics about the caches and geocachers.

9.1 Countries by the number of active caches

This statistics was released on February 10, 2013 on the occasion of the celebrating two million geocaches in the world. There was a list with all

countries in the world, where you can find an active cache. The countries are ordered according to the number of active caches. The first one is the country with the biggest number of caches. I decided to show you the top 20 countries with the biggest number of caches and then also the next 20 countries.

1	Country or Territory	Active Geocache Count	20	Country or Territory	Active Geocache Count
2	United		21	Italy	8962
-	States	882101	22	Slovakia	8175
3	Germany	275660	23	South Africa	7901
4	Canada	160409	24	South Korea	5873
5	United Kingdom	136105	25	Ireland	5416
6	Sweden	62975	26	Poland	4585
7	France	53020	27	Hungary	4582
8	Australia	42921	28	Luxembourg	2502
	Czech	12721	29	Slovenia	2172
9	Republic	32571	30	Latvia	2122
10	Austria	28245	31	Mexico	2098
11	Norway	27200	32	Lithuania	1846
12	Denmark	25523	33	Greece	1807
13	Spain	24531	34	Romania	1786
14	Finland	23016	35	Estonia	1619
15	Netherlands	21594	36	Croatia	1158
16	Portugal	20266	37	Brazil	1128
17	Switzerland	18453			
18	New Zealand	17360	38	Bulgaria	1035
19	Belgium	15790	39	Thailand	929
20	Japan	14183	40	Puerto Rico	929

https://www.geocaching.com/blog/2013/02/celebrating-two-million-geocaches-list-by-country/

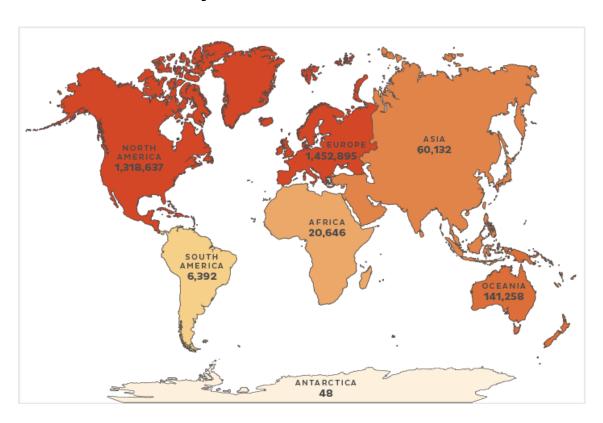
The United States are on the first place, which was kind of predictable, because the United States are really large country and geocaching started here. On the second place there is Germany. According to some other statistics and my experience, German people are really active geocachers with one of the best caches in the world. The Czech Republic is on the ninth place among all these countries, which is pretty amazing according to my opinion. As a small country, Czech Republic can be proud of such placing. Czech people are probably really active in hiding new and also some unique caches, which I can also confirm from my experience.

Along with the list of countries there were released some interesting facts and numbers about geocaching in 2013. There are some of them:

- "Geocaches in Antarctica have been found more than 175 times.
- There are 126 888 geocaches that can be found only at night.
- More than 100 geocaches around the world are only accessible with scuba gear."[44]

On April 18, 2017 geocachers could celebrate 3 million caches on the Earth. On the occasion geocaching released another facts, maps and interesting numbers about geocaching. There is for example the map that shows the number of caches on each of the continents.

9.2 Number of caches per continent



https://www.geocaching.com/blog/2017/04/3-million-geocaches-the-infographic/

The most interesting on this map is that there were more caches in Europe than in the whole North America on that day. Although the numbers of

caches have been still changing every day, I think we can say that European people are quite active cachers. I think that also the number of caches in Antarctica is quite amazing.

There are some interesting facts about geocaching released on April 18, 2017:

- "Currently 360,774 geocachers are also cache owners. 37% of these cache owners have been playing the game for over 5 years.
- 585,346,163 "Found it" and "Attended" logs have been recorded since the game started in 2000.
- Almost 22 million favorite points have been awarded since they were introduced in December of 2009.
- There are even several caches that have never been found. The oldest unfound cache was placed in Venezuela in 2001.
- The most found geocache in the world has approximately 6,000 visitors each year.
- Geocachers gather at over 35,000 events annually to share stories, ideas, and exchange trackables."[45]

9.3 Number of active cachers

These statistics are from project-gc.com and the data is calculated once per week. These are from 17.4.2017.

The first statistics shows how many active cachers are there these days in comparison with the previous year. The first one shows the numbers from the Czech Republic.

Active cachers from Czech Republic	2017	2016	Diffe	rence
Last week	13164	14281	-1117	-8%
Last month	24697	31496	-6799	-22%
Since 1st of January	36403	47569	-11166	-23%
Whole year	36403	78421	-42018	-54%
Statistics from 17.4.2017 http://project-gc.com/Statistics/Overview				

We can see that the numbers are decreasing. There are less cachers this year than in the previous one. The comparison of the data for the last month for

example shows that there were 31496 active geocachers in 2016 and now there are 24697 active geocachers this year. This is a 22% decrease.

The next one shows the data from the United States.

Active cachers from United States	2017	2016	Diffe	rence
Last week	31854	49530	-17676	-36%
Last month	71821	129467	-57646	-45%
Since 1st of January	157399	251924	-94525	-38%
Whole year	157399	598901	-441502	-74%
Statistics from 17.4.2017 http://project-go	com/Stati	stics/Overv	view	

We can see that it is quite the same. The numbers of active geocachers are decreasing. The comparison for the last month shows almost one-half decrease.

As the last I added a statistics of Germany for the comparison, because it is the second country among the geocaching leading countries.

Active cachers from Germany	2017	2016	Diffe	rence
Last week	46876	53015	-6139	-12%
Last month	78206	107470	-29264	-27%
Since 1st of January	123462	166003	-42541	-26%
Whole year	123462	275003	-151541	-55%
Statistics from 17.4.2017 http://proje	ct-gc.com/	Statistics/0	Overview	

We can see that even there is the situation the same.

9.4 Number of hidden caches

The next statistics show how many new geocaches have been hidden in some certain time parts.

The first one shows again the data of the Czech Republic.

Caches hidden in Czech Republic	2017	2016	Diffe	rence
Last week	159	267	-108	-40%
Last month	712	1023	-311	-30%
Since 1st of January	1945	3233	-1288	-40%
Whole year	2168	10329	-8161	-79%
Statistics from 17.4.2017 http://project-gc.c	com/Stati	stics/Ove	rview	

We can see that even the numbers of new hidden caches are decreasing. The comparison for the last month for example shows the 30% decrease.

The next two are again from the United States and from Germany.

Caches hidden in United States	2017	2016	Diffe	rence
Last week	2056	3213	-1157	-36%
Last month	8774	15649	-6875	-44%
Since 1st of January	29245	50677	-21432	-42%
Whole year	30138	151584	-121446	-80%
Statistics from 17.4.2017 http://projec	t-gc.com/S	Statistics/O	verview	
• • • • •	,	·		
Caches hidden in Germany	2017	2016		rence
				rence -21%
Caches hidden in Germany	2017	2016	Diffe	
Caches hidden in Germany Last week	2017 1450	2016 1831	Diffe -381	-21%
Caches hidden in Germany Last week Last month	2017 1450 5837	2016 1831 8029	Diffe -381 -2192	-21% -27%

And the situation is still the same. The decrease is quite big, especially in the United States. I have also tried to look at some other countries such as for example the Netherlands, Sweden, the United Kingdom, Austria, Australia and other and the situation is the same in each of them.

That means that geocachers are less active regarding hiding new geocaches. In my opinion and also according to opinions from other cachers on discussion forums, there have really been more caches archived than published. But that might be just a feeling. The numbers of caches are still changing. There are not even many places where to hide them, some of the places are already full, so it is not necessary to hide so many caches these days, than a few years ago. The old ones or not well-maintained need to go to archive, so maybe that is the reason, why there have been so many geocaches archived these days. But as I said, there have been many new and also good ones published.

9.5 Conclusions on Geocaching interest and statistics

From the previous graphs we can see that the popularity of geocaching is still very high, although it has been slightly decreasing in the last years. The geocaching popularity peaked in 2011 according to the Google Trends. The statistics in "project-gc.com" show that the number of active cachers and also new hidden geocaches is decreasing. In my opinion, the biggest boom of geocaching has already passed. Some people have already lost their interest. But I think that there are still many people that love geocaching so much that

they live it and geocache nearly every day with a big passion, attend events, exchange their experience and explore new places in the world. I think that there are still so many amazing things on geocaching. Even if there is not so big amount of new geocaches, it is still worth it. Many of them are archived, but there are still many new ones published instead of it.

Even if there are still many real geocachers, there is still the question, why there is the slight decrease in the geocachers' activity. What does make geocachers to stop geocaching, or what are the reasons that geocaching is not so much popular than it was a few years ago? Even I can see it lately. There are many problems or misunderstandings accompanying geocaching these days. I have a feeling that geocaching is not what it was a few years later, but that does not mean that I will not do it anymore. I still enjoy it very much, but there are many reasons, why I think geocaching is not on that high level than it was a few years ago. Lately, I meet some of those problems almost every time when I am geocaching.

10 Why people do geocaching

At first I would like to mention, why people actually do geocaching. If I mention my own reasons, they would probably suit all geocachers. But still I have made some research on the discussion forum, where the real geocachers from the whole world are discussing different issues about geocaching.

I have found a topic called "Why do you geocache?" from 2009 on the Geocaching Forum.[46] There are some of the statements from different cachers with my comments:

1. "It's the adventure of the hunt. It gets you off the couch and gets you to exercise without even knowing." (gunnerdog2)

Exactly, geocaching is a big adventure in the real world. You can play it as you would play a computer game, but it all takes place outdoors and you have to move. And you never know, what might happen, while you are hunting.

2. "I started Geocaching as a way to rehab from CHF. It got me out walking. Now that I'm doing better I love being out in the woods and love the challenging hides." (jbar)

This geocacher was probably looking for a motivation to go out and rehabilitate after some disease. This is another advantage of geocaching. You can do it, while you are recovering from some disease and your time you are spending outdoors is more fun.

3. "We do it because it is something we can do as a family." (Smithbats)

I totally agree. Geocaching is definitely the right one activity for the whole family. Even I geocache mostly with my family.

4. "For us it's about the places we go, the people we meet and all the memories we make. It also gets us exercise in an enjoyable way. It's also fun to be able to find something that someone else has hidden." (raslas)

This is something I would say exactly. If we travel or hike somewhere I always look at the geocaching map and find every cache that is possible to find during our trip and I often come over some caches that are hidden on places I would not normally go to or even know about. So geocaching is definitely a good way to explore new places and meet new amazing people from the whole world. You walk many kilometers, while geocaching, so it is definitely a good exercise and after that you have many experiences you can talk about with your friends. I know what I am talking about. After almost 10 years of geocaching I have so much to talk about.

5. "I agree, it is a sickness, a definite addiction! It's all we ever want to do anymore. We ran into some potential cacher's tonight as we were under a bridge. They thought it was so cool that we were out in the dark looking for a tiny hidden box." (Team A & M)

I had to laugh, while I was reading this. This is exactly one of the things why I do geocaching and I remembered us geocaching at night. We have already geocached many times at night and have also met some other cachers during it. I was much more excited then. It was fun being out at night with some other people doing exactly the same "weird" thing and knowing that many other people do not even know about it. It gives you the feeling that you are part of something big.

6. "My husband & I love being in nature and we love being outdoors. We get to spend time together, get exercise, and be a part of something that people all over the world are a part of." (djc114)

Again, you can spend much time outdoors in nature while geocaching, which I love, and you know that you do something that many other people around the world do.

7. "Geocaching is the closest thing I can see to a weekend adventure. Every cache is different, they take you to amazing places, you get to meet new people, solve puzles and you get to find tresure that most people don't know exist. So if you ask me why I geocache, why anyone geocaches, the answer is that everyone wants some adventure in there lives. who wants to collect stamps as a hobby when you can say that you are a high-tech treasure hunter." (dediles)

This is exactly why I geocache. Geocaching is one big adventure. Everyone can find something on it that suits him the most and it connects the modern technologies with spending time outdoors.

8. "I enjoy the hunt and I have also found really awesome areas to hike and backpack,etc...because of geocaching. I have an area that I hike deep into a few hidden mountain lakes to fish...this year I did an overnight camping trip there...that I would never have known about if it wasn't for a cache placed here that I found a couple of years ago.I,in turn,have tried to find out of the way places to hide a few caches so that I can bring others to areas that they might not realize are here." (skeezicks)

Exactly, geocaching is primarily about exploring new places and showing the new explored places to other people by hiding geocaches on these places.

9. "We geocache because it is something my whole family can do and enjoy TOGETHER, from my husband and I all the way down to my 4 year old. The kids love finding the treasure, and my husband loves the hunt, and I just love the closeness it brings caching with my family, extended family and friends!" (TheChagnons)

Another one, who geocache with the family. And there is even the proof of the fact that children actually love geocaching. Children are often not so excited to go out on some trip. Even I had not been so excited about it until we have found geocaching. It was kind of boring. Geocaching gives it some purpose, the trips are much more enjoyable, they have some goal. Children are often excited about seeking "treasures" outdoors. It is something like a reward for them when they find them. Even they then walk many kilometers without even knowing about it, which is I think much better for them than sitting at the computer.

10. "I Geocache because when I first found out about it, it sounded like the greatest activity in the world. My hypothesis was right. I love puzzles, hidden secrets, and exploring. Geocaching has all those things." (Eyeplant)

That is right. Geocaching has many things to offer and I also agree that geocaching is probably the best activity in the world.

11. "I like it because its the only "sport" I can actually participate in. I'm severely asthmatic so anything that involves anything but walking is out." (Twitch Hugs Trees)

There is the proof that really almost everyone can geocache. Many people around the world probably cannot do any sport because of some disease. Geocaching may be a very good option, because it is not exactly sport. You do not have to run, hike many kilometers or swim. There are many caches that are suitable for almost everyone.

12. "We cache because it ties in nicely with all of our other endeavours....kayaking, hiking, biking, travel, photography x-country skiing, snowshoeing..." (kayakers2)

This is exactly one of the purposes of geocaching; to connect it with your normal activities and make them even more enjoyable, adventurous or exciting. You can geocache while hiking, biking, skiing, climbing, travelling and so on.

13. "Its the thrill of the hunt! Its getting out and seeing new places and once in a great while I get to meet someone new. I just love the hunt, it never gets old. I've heard some people calling geocaching a fad that has fallen by the wayside like all the others, not hardly. I like the fact that you can play the game in so many different ways too. It's not about winning, or losing, or competition. It's all about the fun. To me caching is like an addiction, I can never get enough." (Team Idasam)

Again, this is something I would say exactly. Geocaching offers so much. Everyone can choose what to do, where or how to play it. There are cachers that attend many events, cachers that hunt only traditional caches, cachers that love solving mystery caches, or cachers that love to collect geocoins and so on. It is just a fun and I totally agree; it is an addiction. I also think that it never gets old. Every year there are many new things, caches, events, you explore new places, meet new people. All of this is so exciting. But that does not mean that everyone should love geocaching. Everyone is different and has different tastes and hobbies. Those people, who have told him that geocaching has fallen, had not probably been much excited and interested in it.

14. "Getting to see places I didn't know existed and to rid my body of those extra pounds. I've found one more great use: While driving around Iceland, we started using the cache-descriptions more and more instead of the guidebooks to see interesting stuff." (renelm)

15. "For my trip in August I'm pretty much exclusively using caches and cache pages instead of guide books for the ride out there and back and for the actual place." (Chokecherry)

These two statements are quite interesting and I also agree with both of them. Many caches are usually hidden on some important, interesting, or beautiful places. And they are usually hidden by cachers that live nearby and know the surroundings the best. So you can really use the listings of caches to be able to orientate and see some interesting places, because they are made by these people who live there and know the place and so they can give you some good suggestions or advice. But only if the listings are well-made. Some of them may be really informative and helpful.

16. "We only started Geocaching recently thinking it gave us something to do on our walks with the kids and the dog..... WOW that soon took a turn, and pretty quickly too! Didn't realise just how addicting it could be?! We find them on our way shopping, home from work, my other half has even dragged me out of bed at God knows what time in the morning, to go trailing round some creepy woods in the dead of night because a cache was 'released' pretty close to where we live and he wanted to be the FTF? hehe" (ThePeckwoods)

Exactly, as I said before, geocaching is a very good activity for enlivening the normal walks or hikes. And it really is addicting. Even I sometimes look at the cache map, if there is some new cache, when we go only to school, work, or shopping. I also remember our night FTF hunts. Once, it was around midnight and we were already wearing our pyjamas, a new cache was released nearby our home. We took on our trousers and jackets over the pyjamas, turned on the GPS and map on our phones, took flashlights and ran to our car. When we arrived, there had already been some other cachers, so we joined them. This has happened many times to us. Sometimes the caches are released while we are at home, so we just run to them, or while we are at work. So if it is possible we stop everything and go hunting.

10.1 Conclusion on reasons why people do Geocaching

After reading all these statements above, we can mention some main reasons, why people geocache. So the main reason is definitely the adventure and the excitement and thrill from the hunt. That is what geocaching is about. Then of course exploring new places and meeting new people. Geocaching brings you, besides the well-known and amazing places, to places you would probably never go. And you meet many new amazing people that are addicted

to the same activity as you. The next reason is definitely the exercising. Geocaching makes many people exercise in an enjoyable way. Everyone should spend a few hours on a walk in the nature, breath some fresh air, release the stress from work and do something you really like. The next one is that you can do this activity with your family and everyone will enjoy it. Geocaching offers many options for everyone how to enjoy it. The big advantage of geocaching is that you can connect it with your other outdoor hobbies. The last thing is the feeling you are a part of something great that many people around the world do. And I would say that geocaching really is a great activity.

11 Geocaching problems

All these things mentioned above are really amazing. But after almost ten years of me geocaching I would say that geocaching has changed. It is still an amazing activity of course, but lately I come across many problems and misunderstandings while geocaching. The big boom of geocaching maybe caused that there are many people that know about geocaching these days. Sometimes too many. Many of them are active cachers of course. Some of them wanted only to try this activity, but they stopped for whatever reason. And then there are many people that have been geocaching for some time, but they still do not know everything about geocaching and make many mistakes. The bad thing about this is that many of those people do not even try to read the rules of geocaching, find something on the internet if they are not sure about something, or ask another more experienced cacher. From my experience I can say that I meet more and more of those people lately.

Earlier, I also remember me trying to be inconspicuous while seeking a cache, so that the muggles would not see me taking the cache and hiding it back. Nowadays, when I am seeking a cache for a longer time, it happens that someone comes around and says to me: "The cache is out there.", or "Do you need some help? I know where it is." or "You must be looking for a cache, or not?" and many other. And the person does not even have to be a geocacher. I feel that it has just become a well-known thing and you do not have to be

careful about hiding the cache anymore, so that no muggle would see it. I also meet more and more people that go straight to the cache and take it without looking around if there is someone watching.

Geocaching has spread really quickly. I think that it is also because of the media. Sometimes there is an article about geocaching in online newspapers, usually meant to drag more people to some place. Some websites of many tourist destinations or accommodation have an article about geocaching or a link to geocaching. They use it to attract people, because it is also an amazing activity for families with children. Who would not be excited about seeking treasures outdoors? Some tourist destinations even cooperate with Groundspeak and prepare some caches for their area, so it serves as propagation. Lots of new people will know about geocaching thanks to it and it might even become their new activity. For the experienced geocachers, these destinations may be very attractive, because the caches are usually on high level and well maintained. It is the more attractive for the ones who like getting more and more found caches, because there are a lot of caches at one place.

I have also already read many articles in many Czech magazines about geocaching. Some of them are quite alright, but sometimes the articles are quite poorly written and sometimes they are more confusing than informative for people that read about it for the first time. And that may also cause some troubles later. The more experienced geocachers are then often angry about it.

In this chapter I would like to mention some of these problems that I have experienced lately. Some of them are unfortunately quite common and have become a part of geocaching and there is probably nothing we can do about it.

11.1 Geocaches

The most common is probably loss or destruction of a cache. Caches may be destroyed or moved by animals. We have already found a nibbled cache or a cache that was lying nearby its hiding place many times. They may be also destroyed by the nature elements. It is very unpleasant when the cache is not tightly sealed and so there may be water inside. The logbook and other things are then wet and it is not very nice to find such cache. The cache may be also taken by water, if it is near some river that gets overflowed, or it may fall down from some rock.

But many caches are unfortunately destroyed by cachers themselves. They do not read the cache description, where you can often find how to open some caches and then they may destroy the container or mechanism by the careless manipulation. Some cachers probably do not really care and hide a cache on another place than it was before. The next cachers are then confused and so as the owner who has to maintain the cache. This has happened to us. We put a new one on that place, because we thought the previous one got lost. After some time we figured out that geocachers were logging into two caches. The old one was still on its place, only a few meters further. Another problem is that cachers do not trade things properly one for one, but they just take what they want or what they like and do not often put something else into the cache. The last one problem is that the cache gets completely lost. It is probably taken by muggles that do not know what it is, or they like it, because some caches are often full of really nice things, and take it with them. It might also be taken by children that play in that area, or someone who finds it and thinks that it is a trash.

11.2 Geocoins and Travelbugs

Many cachers do not know what these things are and what to do with them. I have already met many of these cachers and I was really surprised and a bit angry about it, because especially geocoins are quite expensive and it is not much pleasant if your geocoin gets lost. Therefore geocachers have the best ones, unique or the most expensive by themselves and show them only at events. Some cachers showed me once a geocoin they got from some other cacher and have carried it for some time and asked me, if I want to exchange it for some other geocoin. After a few minutes I found out that they really thought

that geocoins are only nice things that geocachers exchange among themselves. That I give them my own one, so that they could give it to another cacher and so on. They even thought that they can even keep the one they like. They did not even know that the thing they have carried for a few months actually belongs to someone and the person does not know at all, what happened to his coin. They had no idea that they should log it and move to another cache as soon as possible. Some geocachers move geocoins or travelbugs to other caches, but they do not log them. Many times I have already found a geocoin in some cache and found out by logging on the internet that last time it was logged for example a few months ago and then nothing. The coin was supposed to be in completely another cache according to the logs. So I saved it of course and logged it right, so that the owner would know, where his coin is.

I also think that some geocachers keeps some coins they find in a cache, because they just like it. Especially when they have children. Travelbugs are often some plush toys or just toys for children, so they like it and do not want to give it away. The parents might let them keep it then. Some people probably go to some caches regularly and take the nice coins out of them. Or if some muggle come across a geocache and finds some nice coin inside it, he might also keep it for himself. Geocaches are probably often muggled right from these reasons mentioned above. The other cachers often come to a cache then a there is nothing in it, even if the cache listing says that there are a few coins or travelbugs in it.

11.3 Listings

One of the problems is also the language barrier. Despite the fact geocaching is an international game, not every cache listing has got an English version besides the one in the language of the relevant country. Many geocachers make the English version of their listings, or they translate at least the most important things, but it is not so common. Of course it is not necessary to do it by every cache. Some of them can be easily found, google translator might help if it is necessary. But some caches are much more complicated and

so it is much better to have an English version to prevent some misunderstandings and mistakes. Many cachers do not often hunt all the caches they want, because of it. Try to solve some mystery cache that is in a language you do not understand at all and sometimes even the google translator does not help much.

11.4 Geocachers

Geocachers should follow the geocaching rules, but it is not often like that. For example they are not inconspicuous while seeking a cache. They risk being seen and the cache could be muggled then. Muggles can be very curious and suspicious sometimes. I remember some cases that were even in the online newspapers. Someone has seen a cacher hiding a cache back to its place and called a police. The person thought that the thing he was putting there was a bomb.

On the other hand, sometimes geocachers are too careful and some funny situations may occur. For example you are looking for a cache. You might already know where it is, but there are still some other people, probably muggles, sitting or standing there. So you are waiting for them to leave and to be able to take the cache. After a few minutes, they are still there, acting quite weird and you suddenly realize that they might be also cachers. The both cachers find out then that they are waiting for the other one to leave and log the cache together at the end. This is very common and really comic situation.

Many cachers do not probably read the listings. They do not know then, which way to go, or what they are supposed to look for, or how to open the cache. Then a cache might be destroyed by the careless manipulation, or the hiding place itself might be destroyed. People are able to mess up the whole area, until they find the cache. The area looks like after a tornado then. The stumps are dug up, small trees are damaged. Sometimes they leave the trash in that area or right inside the cache.

The next problem is that many people are probably lazy to read some information about geocaching, the cache types and so on. They do not know the rules, do not have any experience, but they go right hunting, or they hide a new cache. I have met people that went hunting and were looking for a mystery cache on the starting coordinates. Of course they did not find anything. They had no idea what mystery cache is, they were not even surprised that the icon looks different than the other ones on the map. I have also experienced some cacher that did not know the whole process of cache publishing. When the cache was published, the container was not on its place. The FTF hunters were then really angry.

Sometimes even the experienced cachers may have some troubles. The example is the multi caches hunting. I always recommend reading carefully the whole listing, to calculate everything twice and also to take photos of anything you need, or think you might need later. It happens often that we calculate something wrong and the coordinates take you to the wrong place then.

11.5 Conclusion on the problems of Geocaching

Geocaching have maybe become a massive activity. Almost everyone wants to try it and that might be also the main problem. That many people only tried it, did not really read all the rules and after a few found caches they left it. I hope that maybe after some time there will be fewer of these people and only the real geocachers that knows nearly everything about geocaching will remain. And I think that according to the graphs it is happening. The biggest boom has already past, people who realized that they do not like it have left and the really addicted ones have remained. But also the real geocachers must be considerate of the other cachers and also of the nature around them and follow the geocaching rules. Only then geocaching will be the great activity as it is supposed to be.

12 Geocaching glossary

Geocaching – "The word 'Geocaching' was written and said for the first time in 2000. The word was created by combining "GEO" for geography and "CACHING" for the process of storing or hiding materials. Merriam--Webster added "Geocaching" to its dictionary as an official new word in 2012 and "Geocache" was added to the official Scrabble dictionary in 2014." [47]

There is a list of some important terms or acronyms that geocachers use. The Czech synonyms are the same by most of the words; the Czech geocachers use the same terms. But by some of them Czech geocachers have their own expressions they use.

Word/abbreviation	Czech synonym/"translation"	Meaning
Archive	archivace	Removing a cache from geocaching.com. The cache cannot be seen on a map anymore. It is usually done, when a destroyed cache will not be replaced with a new one.
Attributes	atribut	Icons on the cache listings that specifies the location and geocache.
Beta test	betatest	Control of a new cache before it is published.
BF (Brute Force)		Finding a cache in a different way than it was meant to be. Very common by mystery or multi caches. A cacher does not calculate anything, but only tries to find the cache on a selected place.
BYOP (Bring Your Own Pencil/Pen)	přines si vlastní tužku	It is used in some listings by caches that do not contain any pencil.

Cache	keš/keška	Shortened version of a geocache.
Cacher	kešer/kačer	Shortened version of a geocacher.
CITO (Cache In Trash Out)		CITO Events are organized by cachers to clean up forests, parks and other locations.
CWG (Czech Wood Geocoin)		Small wooden coins that geocachers collect and exchange among themselves.
D/T, Difficulty/Terrain	obtížnost a terén	You can find the difficulty and terrain star rating in every listing. The difficulty shows how hard is to find the cache and the terrain shows how hard is to get to the cache.
Disable		This status means that a cache is temporarily inactive. The cache probably needs some maintenance or it is just not possible to find it due to natural or weather conditions.
DNF (Did Not Find)	"nenalezeno"	This is a type of log you use, when you did not find a cache. It is recommended to log DNFs, because when there are more of these logs, the owner then will know that the cache is probably gone.
Drive-in		Drive-in cache can be practically found and logged from a car. These are really quick caches. You just stop, log it and go.
FP (Favourite Point)	"bod oblíbenosti"	If a cacher that has the premium membership likes some cache, he can give it a favourite point.

FTF (First To Find)		This acronym is written by cachers into logbook and on the internet to the log, when they find a cache as a first after the publication.
GC Code		Every cache has its own unique GC Code. Every code starts with the letters "GC" followed by other numbers and letters.
geo-highway	geodálnice	A beaten way to a cache. It may be created, if cachers visit a cache many times. Sometimes you do not even need a GPS when you come to that place, where the cache is and see this way. It often leads you straight to the hiding spot.
GC (geocoin)		An acronym of a geocoin.
Hint	"nápověda"	In a listing you can find a hint that helps you to find a cache.
Listing		A page with information about a cache on the website geocaching.com.
Log		If you find a cache, you write your log into a logbook in the cache and then on the internet. The log often contains your nick, date and what you have exchanged.
Logbook		A piece of paper, or a notebook in a cache, where cachers write their logs.
Muggle	mudla	A person who do not geocache. It is based on the same word used in the Harry Potter series.

muggled	vymudlený	If a cache is muggled, it means that it was found by a muggle and it was destroyed, moved, lost, or the person took all the things out of it.
Notification	notifikace/upozornění	This is only premium member feature. If there is a new cache published, you get a notification on your phone immediately, so you might go on an FTF hunt.
NM (Needs Maintenance)		A type of log. A demand of a cacher to maintain a cache from whatever reason. (bad container condition, wet logbook, and so on)
NA (Needs archived)		A type of log. If the owner seems not to maintain a cache anymore, a cacher can ask for an archivation.
Power Trail		Cache series placed along some tourist path in a certain distance.
PM (Premium Member)		The premium membership contains many great features for cachers. You have to pay a yearly fee for it.
PMO (Premium Member Only)		A cache only for Premium Members. The other cachers cannot see such cache on the map.
Reviewer	reviewer/revírník	Volunteers that publish caches in some certain area of a state.
STF (Second To Find)		This acronym is written by cachers into logbook and on the internet to the log, when they find a cache as a second after the publication.
TB (Travelbug)		An acronym of a travelbug.

TFTC (Thanks For This Cache)	"Díky za keš"	This acronym can be written by cachers in their log.
TNLN (Took nothing, Left Nothing)	"Nic jsem nevzal, nic nenechal"	This can be written in a log, when a cacher did not do any exchange.
TTF (Third to Find)		This acronym is written by cachers into logbook and on the internet to the log, when they find a cache as a third after the publication.
Tracking Number	trackovací číslo	Every trackable item has its own tracking number. You need this tracking number to be able to log a trackable.
Watch list		It is a list of followed caches or trackables by a cacher. You can add a cache or a trackable to your watch list and follow it. You will get notifications of every log from cachers.
WA (Will Attend)		A type of log, when you plan to attend an event.
WP (Waypoint)		A reference point for some physical location on the Earth. Every geocache is a waypoint. You can add some waypoints to your cache listing, such as parking spot, view, crossroad and other.

13 Conclusion

The objective of this thesis is to introduce the outdoor activity Geocaching to the readers, familiarise them with the terms used in this activity and to analyse the popularity of Geocaching, the interest of people all over the world in Geocaching and the current situation of Geocaching itself.

In the theoretical part, readers are familiarized with the creation of Geocaching, the rules of the activity, the individual types and sizes of caches, what to do, if they want to create a cache, the trackable items, the basic equipment, the profile and listing of a cache on "geocaching.com", or with the Geocaching in the Czech Republic. The text is accompanied by many interesting facts and my useful knowledge.

In the practical part, there are two analyses. The first one analyses the people's worldwide interest in Geocaching and shows a few statistics of numbers of active cachers, or hidden caches. The result was that people are really interested in Geocaching. The interest has been radically rising up until 2011, which was the top of the interest. Since then, it has been slowly going down, but in the last two years the interest has been quite the same, which means that the biggest boom has already past and most of the people, who wanted only to try it, have already left. Mostly there have remained only the true geocachers. In my opinion, every hobby goes through the big boom sometimes, which causes the massive increase in interest, but it goes back down to the normal numbers after some time, because many people realise that it is not the right activity they want to do.

The second one analyses why people actually do geocaching. There are a few statements from real geocachers from the geocaching discussion forum. The statements are commented by me. As a result we can mention the most common reasons, why people geocache, which are for example the thrill of the hunt, meeting new amazing people, getting out for a walk and exercise, release the stress and breath fresh air, spending time with the family that also enjoys it,

especially children, or just the feeling of being part of something really great that a lot of people around the world also do.

In the last part there are mentioned some problems that are connected with Geocaching. For example destruction or stealing of caches, destruction of areas where caches are hidden, stealing of geocoins, problems with new cachers that do not read the rules or listings of caches, or they create a new cache without knowing how to do it properly and many others. Some of the problems are just a part of Geocaching and it depends only on people how they will behave. There are just too many people geocaching these days and it is just not possible to control everything. The best thing to do is just do not try to solve these problems too much and only enjoy this great outdoor activity with friends and families.

In the last chapter there is the glossary of terms used in Geocaching. The glossary consists of the terms, the synonym expressions used by the Czech geocachers, or only its translation and then the explanation of each of the terms.

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16 Abstract

The aim of this thesis is the introduction of the outdoor activity called Geocaching and the analysis of its popularity and of the fact why geocaching has become the worldwide phenomenon of the 21st century.

The theoretical part describes the history of geocaching, the principle of the activity, geocaches, events, trackable items, the basic equipment of a geocacher, the listing of a cache, the profile of a cacher, or the geocaching in the Czech Republic.

The practical part consists of four parts. The first part is the analysis of the popularity of geocaching. This part includes a few graphs and statistics that show the peoples' interest in geocaching in the course of time, the interest in geocaching in some countries, the number of active geocachers, or the number of hidden caches. The second part is the analysis of the reasons why people geocache. This part includes a few statements from different cachers from an internet discussion forum and my comments on it. The third part mentions some problems connected with geocaching. The last part includes a glossary of the terms used in geocaching. The thesis is accompanied by many interesting facts from the world of geocaching and by my own useful knowledge and experience gained during the ten years I have been already geocaching.

17 Resumé

Cílem této bakalářské práce je představení outdoorové aktivity zvané Geocaching a analýza její popularity a faktu, proč se geocaching stal celosvětovým fenoménem 21. století.

Teoretická část popisuje historii geocachingu, princip této aktivity, keše, eventy, trackovatelné předměty, základní vybavení kešera, listing keše, profil kešera, nebo geocaching v České republice.

Praktická část se skládá ze čtyř částí. První část je analýza popularity geocachingu. Tato část obsahuje několik grafů a statistik, které ukazují zájem lidí o geocaching v průběhu času, zájem o geocaching v několika zemích, počet aktivních kešerů, nebo počet ukrytých keší. Druhá část je analýza důvodů, proč lidé kešují. Tato část obsahuje několik vyjádření od různých kešerů na internetovém diskuzním fóru a mé komentáře k nim. Třetí část popisuje některé problémy týkající se geocachingu. Poslední část obsahuje slovníček pojmů používaných v geocachingu. Práce je doprovázena mnoha zajímavými fakty ze světa geocachingu a mými vlastními užitečnými poznatky a zkušenostmi nasbíranými během deseti let, co už kešuji.