



# Geocaching 101

A Beginners' Guide to the Game



# Topics we'll cover:

- History of the cache hunt
- What is “Geocaching”?
- GPS and Technology
- Getting Started
- Seeking Geocaches
- Logging a Find
- What next?



# Geocaching in 2 minutes

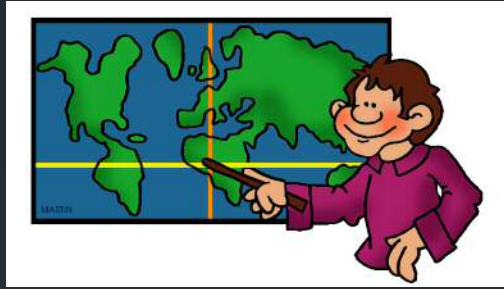
- <http://youtu.be/-4VFeYZTTYs>

# History of the Cache Hunt:

- It all started way back in history...



1000-year-old  
Chinese  
Compass



# Lat and Long



- Latitude (“Lat is flat”) and Longitude (north-south)
- Tracked back to 120 AD
- Ptolemy’s World Atlas contained such lines
  - Atlas was still used through 1450 AD in Europe!

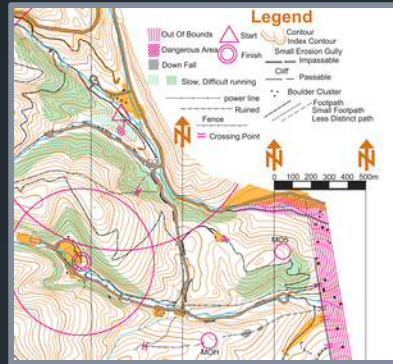




# The Compass

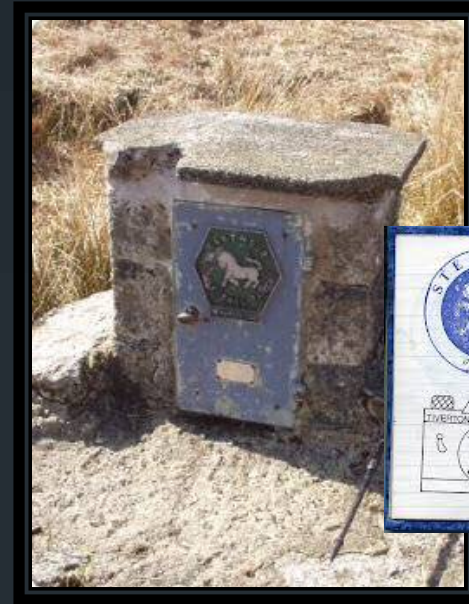
- First as 4<sup>th</sup> Century BC “feng shui” tool
- Attributed to Chinese invention using a lodestone (A magnetic rock containing iron ore)
- Used in 1086 AD Chinese navigation: “South Pointer” spoon
- 1180 AD European accounts of using a compass for marine navigation





# Finding your way

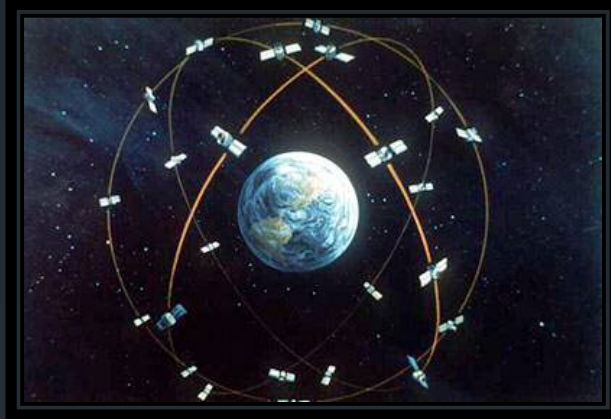
- Compass and a Map
- Orienteering:
  - Began in Scandinavia in the 19<sup>th</sup> Century
  - Used for military training
  - Became competitive sport in 1919 in Sweden
  - Brought to the U.S. in 1946



# Letterboxing

- A way to move calling cards
- Started by Victorian guide James Perrott in 1854
- Included a stamp to record your visit to the boxes in 1907
- 1976 a guide map created that listed all 15 letterboxes
- Thousands listed by the 1980s
- 1998 the hobby was brought to the US via an article in Smithsonian Magazine
- Follow directions or clues to locate and log-stamp your visit



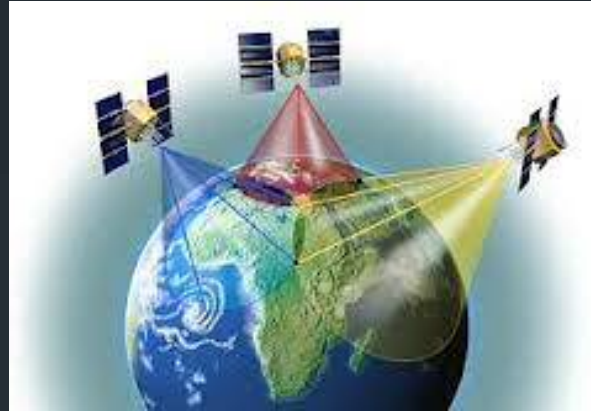


# Global Positioning System

- Started around 1960s with 6 satellites (US Navy TRANSIT system)
- 1973 DoD NAVSTAR GPS program launched
- 1978 first satellites launched
- 1995 24 GPS satellites in place, 12,000 miles above the surface of the earth



# GPS

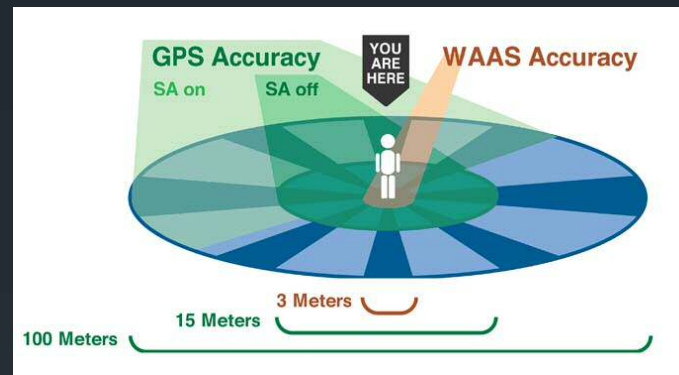


- Signals are calculated to provide coordinates on the sphere of Earth
  - Uses radio signals and atomic clocks
  - Triangulation of at least 4 satellites for “lock”
- Not available to public until after Korea Air flight 007 accident in 1983
- Consumer GPS were 10x less accurate than military due to “Selective Availability”

# Selective Availability



- 1998: President Clinton announces end to SA between 2000 and 2006
- Military quickly developed blocking technology for sensitive areas
- Accuracy would improve 10x for consumer GPS units



# Selective Availability Ends

- May 1, 2000
- Many GPS users in the U.S. had been talking online about what would happen
- GPS units now 10x more accurate
  - Was 100m accuracy for civilian models
  - Now 10m accuracy or better could be achieved
  - GPS sales jump immediately

# “The Great GPS Stash Hunt”

- May 3, 2000
  - Dave Ulmer in Oregon hid a “target” in the woods
  - Listed on an internet GPS users forum



# “GeoCaches”



- May 30, 2000
  - Matt Stum coins the term “geocache”
  - “Geo”, for earth
  - “Cache”, which refers to a temporary hiding place used by humans or animals
- “GPS Stash Hunt” still most common until September, 2000



# Geocaching.com is Born

- GPS stash hunters wish for a database of all caches being created
  - Hard to know if a cache was nearby your location, if one existed at all
- Jeremy Irish works with Mike Teague to create a database and listing website for geocaches
- Adopts “Geocaching.com” as the name
- Launches on September 2, 2000
- Only 75 “official” geocache listings in the world



# Now: How to Get Started

- Own/use/borrow a GPS



- Own/use/borrow a GPS-enabled smartphone

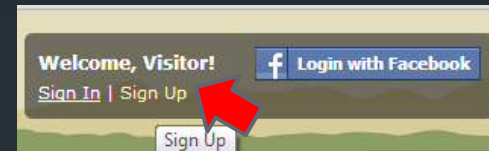




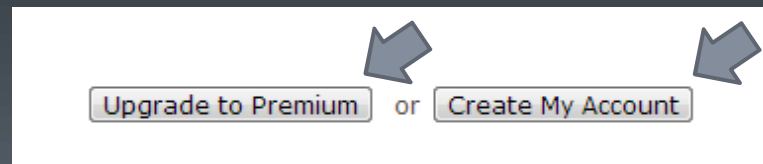


# How to Get Started

- Register for an account on Geocaching.com
  - Click “Sign Up” link at top right corner of the webpage



- Fill out the form
- Choose “Upgrade to Premium” or “Create My Account”





# Wait, what's the difference?

- Basic Members can:
  - Join for FREE
  - View cache listings on [geocaching.com](http://geocaching.com)
  - View coordinates online and print listings to take into the field
  - Enter online logs from your search, upload photos
  - Find, track, discover, and move **Trackables**, such as Travel Bugs and Geocoins
  - Hide caches of your own



# Basic Membership

- Basic Members **can't**:
  - Give a “Favorite Point” to a cache find
  - Access “Premium Member Only” (PMO) cache listings
  - Create Bookmark lists
  - Create downloadable search query lists (“Pocket Queries”)
  - Receive instant notifications
  - Create caches queries along a route of travel
  - Access many other Premium Member tools and features



# Premium Membership

- Costs \$30/year
- Can create Pocket Queries
- Can view, find and log PMO caches
- Can group caches into up to 100 Bookmark Lists
- Can use “Trip Planner”/Caches Along a Route feature
- Can receive instant notifications
- Can earn and award Favorite Points
- Can select Geocaching.com map provider
- Can filter caches...



# Premium Membership

- Can view Geocaching Premium Statistics
- Paperless Geocaching
- Access to the Geocaching Live API
- Access to all other Groundspeak websites
- View Audit Logs on your own created PMO caches
- Supports the development and maintenance of Geocaching.com



# What Do I Need?

- A GPS unit/GPS Enabled Smartphone
- A pencil and/or pen
- Cache listings (Printed, or on your “paperless” device)
- Relevant maps and traditional compass
- Other Tools of the Trade (TOTT)
  - Gloves, multi-tool, flashlight, mirror, camera, spare ziplock bags, spare log sheets, etc.

# A GPS? Where to I start?

- Any handheld GPS unit will work. Old or new.
- Choose a model that suits your needs and uses
- Check online reviews to assist in your search and to narrow choices





# Smartphones, too?

- Smartphone Apps exist for finding geocaches:
  - Geocaching.com official app
  - NeonGeo
  - CacheBox
  - CacheMaid
  - Locus
  - A:Drake
  - CacheSense
  - And more!





# Which is better?

- GPS
  - Purpose-built to create, save, and find waypoints
  - Designed to be dropped, dunked, frozen, etc. and survive it all
  - Generally more accurate in more situations
  - Better battery life
  - Use for other activities
- Smartphone
  - You may already own one
  - Paperless geocaching is easy with Apps
  - Lower battery life when using GPS
  - Less accurate in forests or when you don't have cell service:
    - Good for finding caches, questionable for hiding them.



# Finding Geocaches

- Many cache types
- Caches vary in size
- Caches have mostly-accurate difficulty ratings
- Caches are rated by terrain
  
- Note: All ratings are subjective, and will vary based on region, user, and other variables

# Cache Types



- Traditional



- Multi



- Letterbox Hybrid



- Earthcache



- Puzzle/Unknown



- Event/CITO event



- Whereigo



And others that you can find:





# Cache Sizes

- Micro:
  - Less than 100ml (35mm film canister)
  - Might include “Nano” caches: less than 10ml
- Small
  - 100ml or larger, but less than 1L(Sandwich storage container)
- Regular
  - 1L or larger, but less than 20L (Ammo can or “shoebox-sized”)
- Large
  - 20L or larger (5-gallon bucket)
- Other
  - Check the description for information. Can mean “Nano”

# Difficulty Ratings



- From 1-5 (1 is easiest, 5 is most difficult):
- 1: In plain sight, or can be found in a few minutes of searching
- 2: The average seeker would be able to find this in less than 30 minutes of searching
- 3: An experienced cacher will find this challenging, and might take up a good portion of an afternoon
- 4: A real challenge for the experienced cacher. May require special skills or knowledge, or in-depth preparation. May require multiple days or trips to complete
- 5: A serious mental or physical challenge. Will require special skills or knowledge to find or open the cache.

# Terrain Ratings



- 1: Handicapped accessible. Terrain is likely to be paved, is relatively flat, and requires less than a ½ mile hike
- 2: Suitable for small children. Terrain is along marked gravel or dirt trails, and there are no steep elevation changes or heavy undergrowth. Less than a 2 mile hike required.
- 3: Not suitable for small children. Terrain is likely off trail, and one could encounter heavy undergrowth, some steep elevation changes, and is more than a 2 mile hike.
- 4: Terrain is probably off trail. Will have very heavy overgrowth, and/or very steep elevation changes (requiring use of hands), and/or is more than a 10-mile hike. For experienced outdoor enthusiasts only.
- 5: Extremely challenging terrain. Requires specialized equipment to complete, or is otherwise difficult. (4wd, SCUBA, rock climbing, etc.)

# Finding Geocaches

- Beginner? Start with Traditional caches
- Regular/Large sizes
- Lower D/T ratings
- Find one that has been found by someone else recently
- Find a “geocaching mentor”
- “If you aren’t having fun, you’re doing it wrong...”





# Video Break!

- [Selecting your first geocache](#)



# Finding Geocaches



- Set your GPS to find the coordinates provided
  - Check for errors
  - Be sure you are using the WGS84 datum
  - Set to use decimal minutes (N dd mm.mmm/W ddd mm.mmm)
- Select “Go To” function, and follow the arrow
- Follow established roads and paths until you get close
  - Don’t “bushwhack” unless you have to!



## Arriving at “Ground Zero”

- GZ is where your GPS shows that you are closest to zero feet away
- Know your GPS accuracy/EPE at that time
  - Accuracy/EPE will let you know your approximate search radius from GZ
- Put away your GPS and start your search



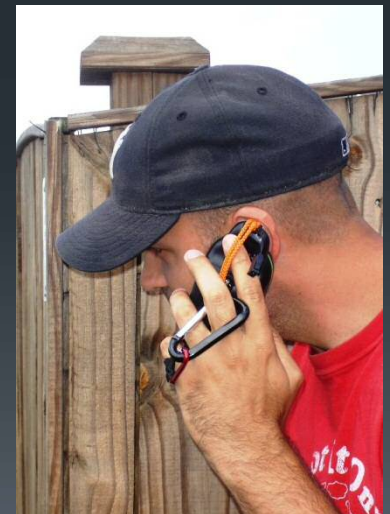
# Searching for a Geocache

- Look around for likely spots
  - Ask: “Where could this size of cache be hidden?”
  - Look: What is out of place?
  - Feel: Poke around with a stick carefully
- Lift, Look, Replace
  - The search should not impact the surroundings
  - It should not look like anyone was there after you leave
- Be aware of your surroundings
  - Watch for “muggles”
  - Use care near cliffs, hills, or hanging objects

# Muggles!



- “Muggle” refers to a person who does not geocache
- If you are being watched, leave your search for another time
- Be prepared to explain yourself
- Don’t let the hidden cache become compromised!
- “Stealth” attribute is a warning
- Look like you belong there





# Video Break!

- [Finding your first geocache](#)



# Finding a Geocache

- Be sure grabbing the cache won't damage the surroundings
- Open carefully
- Locate the logbook inside the cache
- Protect the cache from the elements
  - Close to keep out rain or snow
  - Clean out any moisture or organic materials
  - Cover the logbook to keep it dry while signing

# Logging Your Find

- Sign the logbook!
  - Put down your name (geocaching.com username) and the date
  - Leave a logbook entry about your search for others to enjoy
  - Small logbooks/logsheets might only fit initials
    - Write small!
- Not a requirement to leave anything more than your name and the date



# The Cache Find



- What are the rules of geocaching?
  - If you take something from the cache, leave something of equal or greater value.
  - Write about your find in the cache logbook
  - Log your experience at [geocaching.com](http://geocaching.com)

[www.geocaching.com/guide](http://www.geocaching.com/guide)



# Trading SWAG

- SWAG is for trading!
- Trade fairly.
  - Trade up in value
  - Trade even in value
  - Do not trade at all
- Travel Bugs and Geocoins are **NOT** trade items!
  - Enjoy finding out where the bugs and coins have been!
  - Log any travelers you take at [geocaching.com/track](http://geocaching.com/track) ASAP
  - Place the travelers in another cache to **help it along with its mission**



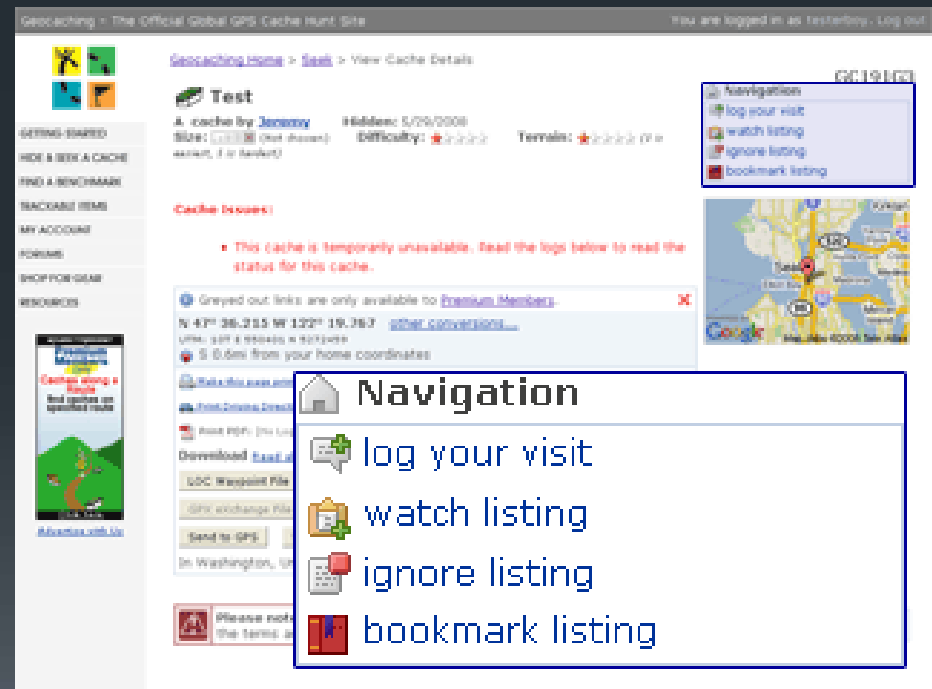


# Being a Responsible Cacher

- If a cache is wet, dry it out! (This includes snow)
- Replace the log and contents back in the cache carefully
  - Logbook on top
  - SWAG fits without problems
- Replace the lid securely—Keep the water/snow out!
- Put the cache back **exactly** as you found it
- Make a note of any issues to notify the cache owner with your online log

# Logging Your Visit

- Many log types to use:
  - “Found It”
  - “Did Not Find” (DNF)
  - “Note”
  - “Needs Maintenance” (NM)
  - “Needs Archived” (NA)



The screenshot shows the Geocaching website interface. The main content area displays details for a cache named "Test" by user "Jeremy". It includes the cache's status (A), address (5/25/2008), difficulty (1.0), and terrain (1.0). A red message indicates the cache is temporarily unavailable. Below this, there are links for "Navigation", "log your visit", "watch listing", "ignore listing", and "bookmark listing". A navigation menu is overlaid on the right side of the page, listing these same options with corresponding icons.

Navigation

- log your visit
- watch listing
- ignore listing
- bookmark listing

# Found it! 😊

- Use this log type if you found the cache, and signed the log
- Can be used in addition to a “NM”, “NA”, or Note log
- Talk about your experience
  - Don’t “spoil” the hide in your log
- Do not post a “Found it” if you did not sign the log
  - Post a “Note”, “DNF”, or “NM”, depending on situation

# Did Not Find 🙄

- You searched for the cache, but did not find the container.
- For each visit—multiples are OK
- If you find a container, but no log, use a “Note” log
- Can be used with “NM” and/or “NA” logs
- Log EVERY DNF to help owners and community members know
- Absolutely NO shame in logging that you didn’t find a cache that you looked for

# Note

- Used for many reasons
  - A subsequent visit to the cache
  - Dropping off/picking up a trackable
  - Adding more to your “Found it” log due to overflow
  - You began a search, but did not reach GZ for some noted reason
  - As non-consequential contact with owner/watcher/bookmarks
- If you are unsure if the cache is there, but you cannot confirm that it is missing, use DNF and explain, not “NA”

# Needs Maintenance

- To flag a cache in need of owner maintenance
- If you found the cache, but could not log
  - Missing/wet logbook
  - “Muggled”
- If the area around GZ has been *significantly* altered
- Post a Note if you did not actually visit GZ
- Post a DNF if you did not find when you visited GZ

# Needs Archived

- Use ONLY when cache needs Volunteer Reviewer attention
- Automatically notifies a Volunteer Reviewer
  - If unsure if the cache needs to be archived, contact the owner and Reviewer via their online profile email
- Should be used cautiously
  - If cache breaks laws
  - If cache is placed against guidelines
  - If cache is confirmed missing, and owner is unresponsive to emails and logs

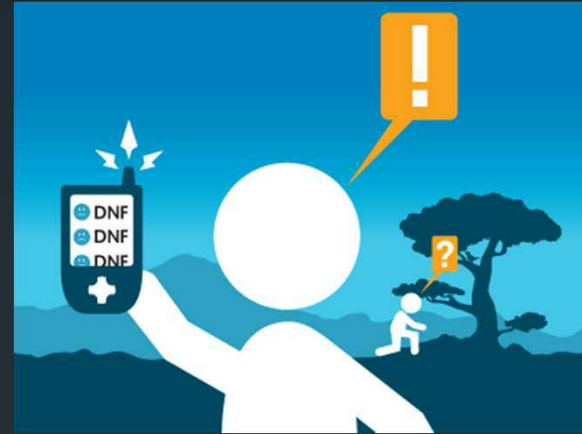


# Logging Your Visit



- Make sure date of log matches actual date of visit
- Share about your adventures
- Be polite!
- Do not “spoil” the hide in your log
  
- Cache owners and seekers appreciate good logs!
  - Most find abbreviated (“TFTC”) logs to be insulting
  - Context about the search is appreciated (length of hike, conditions of trails, etc.)

# Logging Your Visit



- DNF logs are helpful. Use them every time!
  - Can help owners
  - Can help future seekers
  - Gives context to NM or NA logs for owners and Reviewers
- NM logs should be used accurately
  - Do not use just because you DNF
  - If you have been to GZ and seen cache/remains of cache
- NA logs should be used as a last resort
  - Can be used with a DNF if long history of DNF/NM is present
  - Do not use as retaliation!
  - Use only after other polite contact has been made

# What Now?

- Find more caches!
- Join as a Premium member
- Join a local organization
- Consider hiding caches after you have a grasp for the game, and familiarity with the guidelines





# Get Familiar with the Game

- Be sure to spend some time reading through the “User Manual”:
- Read through the “Getting Started” webpage
  - [www.geocaching.com/guide/default.aspx](http://www.geocaching.com/guide/default.aspx)
- Get familiar with the guidelines
  - “Knowledge Books”:  
[www.support.groundspeak.com/index.php?pg=kb](http://www.support.groundspeak.com/index.php?pg=kb)



# Join GeocacheAlaska!

- Your representative Alaska organization
- Volunteer members make EduVents across the state possible
- Work with local, state, and federal systems to promote, permit, and participate in the game





# Membership is Vital

- Get involved! ([GeocacheAlaska.org](http://GeocacheAlaska.org))
  - GeocacheAlaska! brings the community together to secure permits with land managers
  - Backed by an involved, knowledgeable membership, the united group better negotiates for permit terms and awareness initiatives





## What does GeocacheAlaska! do?

- Sponsors and organizes statewide and regional events
- Secured an adopt-a-highway section of the Seward Highway for regular CITO events
- Designs, produces, and offers Alaska geocoins and travelers
- Makes available licensed geocaching merchandise for members
- Maintains EduVent resources in one place to help you learn more about the game in a clear, concise manner
- Gives Alaskan geocachers a forum to discuss geocaching, and our great state!



# Enjoy Playing the Game!

- Questions?

- Links:

- GeocacheAlaska! Education:  
[www.geocachealaska.org/education.htm](http://www.geocachealaska.org/education.htm)
- GeocacheAlaska! Newsletters:  
[www.geocachealaska.org/newsletters.htm](http://www.geocachealaska.org/newsletters.htm)