

# ***Geocaching to Promote Scouting***

## ***Training Summary***

Geocaching is an exciting new sport that uses GPS navigation to find hidden treasures. It provides another tool for the fun-with-a-purpose toolbox and can combine outdoor adventure with advancement, recruiting, retention, and public relations. The following training provides an overview of the sport and includes ideas on how to use it in Boy Scouting to enhance the level of program for all youth. Trainers for this course should have some experience with GPS use and geocaching, and should be familiar with the Internet resources given in the course.

## ***Time Required***

60 minutes

## ***Target Audience***

This training is intended for adults or older youth leaders.

## ***Learning Objectives***

At the end of this session, participants will be able to

- Experience the fun of a geohunt themselves.
- Describe geocaching and how it can be used to support the Scouting program.
- Discover new games and learning opportunities for Boy Scouts.
- Understand geocaching rules and etiquette and why they are important.
- Learn how geocaching can enhance advancement opportunities.
- Develop a plan to use geocaching for recruiting.
- Begin thinking about how geocaching can be used in public relations events.
- Gain an understanding of how GPS technology works.
- Practice using a GPS receiver (GPSr).

## ***Training Format***

This training includes a hands-on session in learning to use a basic GPS receiver (GPSr) and will allow the participants to try a simple geocache hide-and-seek event.

## ***Required Materials***

- Handouts
  - Sample geocache map specific to training region (one per participant)
  - **Geocaching References** (one per participant)
  - **Rules of the Game** (one per team)
  - **Geocaching Rules and Etiquette** (one per participant)
  - **Geocacher's Creed** (one per participant)
- Flip chart and markers
- Basic GPS units (minimum one for each team)
- Sample geocache container
- Three caches, name tags, pens, color-coded questions, and prizes for sample geocaching game
- Recognition items (optional)

## ***Geocaching to Promote Scouting***

Geocaching is an entertaining adventure game for GPS users, with hundreds of thousands of active members in more than 200 countries. It is a modified treasure hunt using GPS coordinates to locate the prize, or cache. There are numerous public geocaches hidden around your community, probably very close to where you live. Finding many of these treasures involves taking beautiful hikes and, perhaps, puzzles to solve.

What could be a more natural partnership than Scouting and geocaching?

Pathfinding has been part of Scouting from its very beginning. GPS technology provides an augmented compass and measuring system, which is an essential part of the increasingly technology-oriented lives of this generation. Remember, however, that GPS technology simply is updating an old and traditional Scouting skill; the older methods should not be forgotten. Map and compass skills are an invaluable supplement to any GPS use, and the importance of these skills should be reinforced whenever possible. Most importantly, the Scouting's values, including "fun with a purpose," are paramount to any Scouting activity.

### ***How Does GPS Work?***

Briefly explain the global positioning system and how GPS receivers use signals from satellites to find a location.

The 24 satellites that make up the GPS network broadcast radio signals that a GPSr can receive. Once the receiver has received a minimum of three satellite signals, it can calculate its location coordinates. The more satellites the GPSr has tracked, the more accurate its calculations will be. The signals are subject to interference and will affect the GPSr accuracy as well. Overcast weather, power lines, trees, buildings, steep canyons, and valleys all can affect the signal strength and therefore change the accuracy of the GPSr readings. A GPS unit will be most accurate when the user has a clear, unobstructed view of the sky and horizon.

In addition, no GPS unit has 100 percent accuracy, and it will rarely lead you to the exact spot. Usually, the accuracy is 20 feet or less—and that's the *radius*—so there is easily an area with a 40-foot diameter to search. Thus, once you've reached your search point, there is usually still some searching to do. Take care that the boys don't get frustrated. Hints are invaluable!

Make the following points on the limitations of GPS use.

- Your GPS arrow points you "as the crow flies," which might not be the best route.
- You may lose signal.
- Your accuracy may be very low.
- The receiver's batteries can die.
- You might have programmed in the wrong information.

Suggest to geocaching leaders that they design these limitations into an event to be sure the boys understand the problems that can occur. Geocaching is the perfect tool to illustrate the need for map and compass skills!

### ***Sample Geocache Game***

***Instructor's Note:*** *Before the course, find easy hiding spots for three caches. All waypoints should be preprogrammed into the GPS units, as this session does not focus on programming the GPSr, but only on finding a cache. These can be as simple as having the cache sitting on the tire of a car in the parking lot—the point is simply to have the participants have a chance to follow the arrow of the GPS unit and experience the thrill of the find.*

*It is best to use similar units for all teams and not have the participants bring and use their own GPS units. There is a wide variety of unit types, each with a different mode of operation, and there is not time to program waypoints into additional units. Tell them that they should experience using the same GPSr that the boys use.*

Ask the participants how many are familiar with geocaching and/or GPS use and how many are novices. Divide the teams with a mix of experienced and inexperienced users. It is good if team members do not know all the members on their team, but do not do introductions yet. That will be a part of the game. Hand out the GPSrs to each team and orient them to the specifics of the GPS operation for these units using a visual that shows the buttons and screens needed for the game. Explain just what is needed for the game—it is easy to bog down in all the advanced features of the GPS units, and that is not the scope of this session.

### ***Explain the Challenge***

The goal is to find three geocaches. Give each team a copy of **the Rules of the Game**.

Go outside to the parking lot or other nearby spot where there is good GPS reception. Have each team look at the GPS unit; it should be preactivated so that it has acquired the satellites.

Briefly review GPS operation. Explain the initial screen, and point out that the GPSr has tracked the satellite signals. Illustrate how to go to the “Find Waypoint” screen to bring up the arrow.

Explain that the GPSr is tracking the signals of the satellites that are currently in the horizon sky. As each GPSr establishes a signal connection with at least three satellites, the screen should say “Ready to Navigate.” Remind participants that the accuracy shown will change depending on the number of satellites tracked and the amount of interference of the signals. Emphasize that the GPSr only gets them close to the actual location and that they will likely have to hunt for the cache. Depending on the GPS units used, you may have to explain that the arrow only changes direction when they are moving.

As the team prepares to begin hunting, explain the team rules as follows.

- All team members should stay together.
- Do not run. There is no need to get injured.
- Remember the principles of Leave No Trace, and do not tread on things you shouldn't (gardens, private property, etc.).
- Attempt to involve everyone on the team. Everyone should have a responsibility.
- Each team should have a troop guide (staff member) as its chaperone. Do not ditch the troop guide.

Show everyone the cache container so they know what they are looking for. Have all teams proceed together to waypoint 001, and meet them there. (The teams should then begin traveling in the direction the GPSr arrow indicates. You may need to remind them to MOVE to get the directional arrow to change)

**Waypoint One:** The first cache should contain color-coded participant name tags or colored tape or dots to add to their existing name tag. In case participants have not pre-registered, have blank nametags and a pen in the cache in addition to the name tags. Have participants introduce themselves to their team as they put on their name tags.

Once everyone has located the first cache, they should have a good feel how this game works. Tell them that they simply need to find two more caches and do what it says to do at the site. They will find the next two locations preprogrammed in the GPSr. Show them how to find these waypoints in the unit with a "Go To." There is not time for teaching how to program the GPS unit in this training, but this can be covered in detail later.

Entertain any questions and tell them they need to be back at the classroom in no later than 15 minutes. The entire team needs to be present at the classroom to be considered on time. Stress the importance of returning on time even if they don't find all of the caches.

**Waypoints Two and Three:** Send the teams out to find two more easy caches. The second cache will have a small trinket or gift, like an inexpensive pin or cache-in-trash-out (CITO) container, which is a simple film can with a label and a trash bag inside of it. Everyone gets a prize.

The third cache will have color-coded "getting to know me" questions, like "Find a Scouter who is an Eagle Scout." Each participant takes a question and returns to the classroom.

Following the exercise, have the participants return to the training room. As they reassemble in the classroom, have them introduce themselves to another Scouter and ask the question they got from the final cache. For example, if the Scouter's question is on yellow paper, he or she needs to meet someone with a yellow nametag. Take two to three minutes to do this.

The hidden point of the game is to have the team get to know each other and to provide a small gift (such as a cache-in-trash-out token) that will support the material to come later in the course. This point will be debriefed when they reassemble.

Ask the participants if they had fun and if they learned anything. See if they come up with the fact that they accomplished the introduction and ice-breaker portion of the training in a novel manner. If they don't, explain what you did. If you chose to put CITO containers into the caches, tell participants that they will understand the significance of the gift shortly when we explain geocaching and service ideas.

Ask the participants write down an idea of how they think geocaching can augment the Scouting program. Then ask them to share with the group. Possible answers include:

- It's a lot of fun.
- It adds variety and novelty to many existing events (hikes, camporees, etc.).
- Both programs love and support the outdoors.
- It allows the youth to use their brains as well as be outdoors.
- Both get us all away from the TV and video games!

Use the results of brainstorming to make the following points.

- Geocaching is fun. It can be coupled with advancement and team-building exercises.
- It leads to the discovery of new places one might not visit otherwise.
- Geocaching can add pizzazz and variety to advancement requirements.
- It's a great recruitment tool. Older youth love the sport!
- It's also good for retention of youth members. When they have fun, they stay in the program.
- Geocaching is a great way to showcase Scouting to the public. For example, we will describe the Cache to Eagle series, where public caches are hidden at the sites of Eagle Scout service projects for the public to find.

### ***Geocaching to Promote Scouting: The Plan***

The overview will include discussion of the following:

- How to use geocaching for troop, district, and council Boy Scout events
- Geocaching rules and etiquette
- Which advancement requirements can use geocaching (and which cannot)
- How to use geocaching events for recruiting
- The Cache to Eagle program and CITO events to enhance public relations

### ***Using Geocaching for Troop, District, and Council Events***

*Note: This session will simply provide a short list of program ideas; the 60-minute timeframe is not suitable to go over a wide assortment of games or hands-on learning. It is suggested that separate, longer training sessions be developed to focus on the details of these games. These additional modules could include information on how to build and hide caches, demonstrations of a variety of games, and instructing troop leaders to incorporate geocaching into the troop meeting and calendar plan.*

Ask the group to share any experiences they have had using geocaching and/or GPS technology in their troops. List answers on the flip chart. Point out to the group that there are many opportunities to use geocaching games in the Boy Scout program.

Geocaching will have a different appeal for each age group, as the boys' interests and skills vary dramatically with their ages. In general, young Scouts need a lot of help with the GPS units, require very easy finds with a tangible reward, and are more likely to become bored if the event lasts longer than 45 to 60 minutes. This is important to remember if the troop uses a geocaching event for recruiting Cub Scouts. Boy Scouts like more challenge, both mentally and physically, and appreciate a complex event with a goal such as "reaching Eagle." Geocaching captures all aspects of the Venture patrol (and Venturing) program, and it can complement high-adventure activities and provide wonderful teaching opportunities for older youth to share the sport with others.

Briefly describe some examples of geocaching games for different ages.

### ***Boy Scout Activities***

**Patrol Activities**—Patrols can use GPS-related games in a wide variety of ways, both at troop meetings and on troop or patrol outings. As in the National Youth Leadership Training course, learning to use the GPS unit is a great way for the patrol leader to model the Teaching EDGE™. Patrols can use GPS and geocaching to support patrol outings, including public geocaching, hikes with a geocache-assisted theme, advancement, and more.

**Troop Activities**—Geocaching is easy to build into a troop meeting night, especially as a part of the interpatrol activity section of the troop meeting. Geohunts can be themed to any topic—a shortened version of a hunt for Eagle merit badges, or hunting for rank advancement is always popular. In addition, the boys can have a lot of fun building cache containers in troop meetings, designing puzzle caches, and setting themed courses for each other. Teamwork should be encouraged, and while competition is fun, troop leaders can and should reinforce the concept of helping other Scouts succeed whenever possible.

*Note: It is a good idea to deliberately plan at least one location on a troop geocache event where getting signal is not possible. Geocaching is a great way to learn how vital map and compass skills are, as well as to remind Scouts that one can never trust technology 100 percent—batteries die, coordinates are programmed incorrectly, etc.*

### ***District and Council Activities***

**Geohunt for Eagle**—Geocaching events are fun and relatively easy to put on for quite large groups. One prime location for a district, council, or intercouncil event is at one of the council's summer camp properties. For example, you can design a simple event themed for Boy Scouts, with the objective to find "merit badges" to reach Eagle rank. The geocaches can be hidden at the actual sites where the event occurs at camp—Swimming by the lake, Rifle Shooting at the range, etc. Care must be taken in placement of the caches as described in the safety rules—for example, one could hide a

cache outside of the rifle range but never in an area where Scouts should not cross without a rangemaster present.

It is recommended that 30 to 50 caches of varying difficulty be hidden for a three- to four-hour-long event. Additional finds above the 21 required for Eagle rank count toward Eagle Palms. This type of event can easily accommodate hundreds of participants.

This type of camp location has the added advantage of showcasing the council's properties and camp facilities to encourage summer camp attendance and off-season use.

### ***Geocaching Rules and Etiquette***

Rules for hiding caches hold for private Scout events as well as public caches.

As with any Scout event, rule No. 1 is safety. Boys are likely to be excited about finding the cache and may or may not use common sense to get to it, so take care that you don't place a cache that in any way leads them into a dangerous situation. This includes the following obvious rules:

- Stay far away from road traffic and railroad crossings.
- Don't place a cache higher than 6 feet or require any dangerous climbing to reach it.
- Don't require Scouts to swim to reach the cache.
- Public caches are often magnetic containers stuck onto electrical switch boxes. Common sense says to avoid these as well.
- Always enforce the buddy system.

Rule No. 2 is to respect the environment.

- Never bury a cache in the ground. You can place a pile of sticks or rocks over it, however.
- Avoid sensitive ecosystems. Remember that hunters will make a beeline for the cache and might trample vegetation in the vicinity. Place caches so that they can be reached by existing trail access.
- Don't place caches in archaeological or historic sites.
- Don't deface any object, natural or manmade.
- Many geocachers hide small caches in lightpost bases, sprinkler heads, etc. These should be avoided, as we don't want the Scouts ripping up all the bona fide hardware looking for the loose or "fake" one.

Rule No. 3 is to respect private property.

- Get permission from land managers to use parks, Scout camps, etc., for your events
- Do not put caches on national park land, national wildlife refuges, etc. These are currently not allowed. Local laws and policies vary, so check with any relevant agency before placing caches.
- Caches in or near military installations are not allowed.
- Caches are not allowed on elementary and secondary school property.

- Avoid sites that could be deemed potential or possible targets for terrorist attacks. These include but are not limited to highway bridges, dams, government buildings, and airports.

Rule No. 4 is to be a positive ambassador for Scouting. As with all else we do, cache using the Scout Oath and Law.

We want Boy Scouts to go above and beyond the regular guidelines. It only takes one or two groups who don't follow the rules to give all of BSA—and geocaching—a bad name. There is a growing concern about Scout troops who set up caches and then abandon them, or who have unsupervised kids who trash the area. Don't let this be your group. There are a number of ongoing negotiations to open up state parks, open-space districts, etc., to geocaching, and we can help this effort by doing our best to be good geocaching citizens.

### *Etiquette*

- Practice Cache In and Trash Out (CITO) – always carry a trash bag and remove litter along your route.
- Follow Leave No Trace guidelines in the natural environment. This doesn't mean you can't find or place a cache near a trail in the woods. It does mean that we follow all LNT guidelines, especially in the wilderness.
- Be careful of the area around the cache – don't trample the grounds, rip up all the sprinkler heads, etc in your frenzy to find the cache
- Follow all laws and Regulations – never enter private property without permission
- Write an entry in the logbook at the cache.
- Take a toy, leave a toy. Items are there for fun and for trade. Try to leave something of equal value to what you take for yourself
- Respect other visitors around the area.

Summarize the section by reading or showing a slide of the **Geocacher's Creed**.

### *Advancement Dos and Don'ts*

Ask the participants to think of Advancement requirements that could be enhanced by geocaching. List answers on flipchart. Possibilities include:

- **Tenderfoot**—Have GPS lead to a poisonous plant so they know what to look for.
- **Second Class**—Set up a GPS course to find and identify evidence of native animals, or use a geocache theme for a patrol or troop campout to earn the five activities.
- **First Class**—As with Second Class, geocache events at campouts are a fun way to earn some of the 10 required activities. A GPS course can assist with finding evidence of 10 native plants.

Remind participants that we cannot change or modify the requirements in any way. For example, it is not allowed to use a GPS unit for Second Class requirements 1a and 1b or First Class requirements 1 and 2, which call for orienteering and/or use of a map and compass. You could use geocaching to complement the 5-mile hike for First Class, as



long as a map and compass are still used. At this time, the Orienteering merit badge does not use GPS technology in any way.

### ***Recruiting and Public Relations***

GPS use can greatly enhance the Venture patrol or high-adventure program. Older youth love the large-event format and can master more complicated types of caches, such as multipart caches or those with puzzles that must be solved to get the correct coordinates for the actual cache.

Running geocaching events is a great way for troops to recruit and retain older members. High schools will often sanction these events, which can be a foot in the door to show large non-Scouting groups how much fun the Scouting program can be.

### ***The Cache to Eagle Program***

The Cache to Eagle program consists of dozens of public geocaches that are posted on geocaching.com. These are normal public caches set up at the sites of nice Eagle projects that also offer good cache spots. In most ways they are like an ordinary cache: all rules followed, caches are properly maintained by the owners, they are located in a good site, etc. The additions are twofold: The cache description includes information about the service that was done and there is a prize (such as a patch) that can be earned or purchased. Most of the series consist of 12 sites, with each site having a point of the Scout Law as the clue that must be turned in to earn the patch.

Initial response to the Cache to Eagle series pilot has been fantastic. Hundreds of people visit and observe Scouting Eagle projects, and many of them write public notes on the logs at geocaching.com. Scouts and Scouters love to visit these, as they get to see a wide variety of Eagle projects themselves, as well as have fun finding the cache. It is free, easy and a true win-win situation for both Scouting and the geocaching community.

All councils and districts are encouraged to expand on this program with public caches of their own. If each district set up only 12 Cache to Eagle geocaches, we would have 1,320,000 visits to our Eagle projects by the public each year—and this is a minimum estimate!

There are additional guidelines that must be followed, however. It is important that we do not ask for money or for membership to a specific unit, and that the Eagle projects that are chosen are lasting tributes to Scouting's service.

### ***Cache In Trash Out Program (CITO)***

Remind participants about Good Turn for America and the value that Scouting service brings to the community. Explain that the CITO program is an easy way for troops and councils to help the environment while having fun.

The CITO program is a wonderful way to merge Scouting, Leave No Trace, and geocaching. Scouts and other geocachers are encouraged to bring out any trash they find while geocaching, thus enhancing the sport (and Scouting) in the eyes of the park system

and the public. CITO events are simple, easy-to-arrange park cleanup and service events, usually coupled with a small geohunt. There are often public CITO events sponsored by local geocaching groups, or a troop or council could sponsor an event, which can be listed for free on [geocaching.com](http://geocaching.com) and provide yet another fun and free way to promote the positive values of Scouting to the community at large.

### ***Travel Bugs***

A travel bug is a small item with a registered dog tag that travels around the world. These bugs often have a mission—for example, a travel bug Scout toy may have the mission to visit as many councils as possible before a trip to Gilwell Field in England. One travel bug, “Back to Gilwell,” has already traveled thousands of miles over many continents in its quest to return to Gilwell Park in England. This is a lot of fun, and each one of these brings Scouting into the minds of the public.

### ***Conclusion and Recognition***

The presenter concludes the session by thanking all participants for coming and awarding recognition items, if desired.

A low-cost recognition item is a simple CITO container—these are low cost (requires only a film canister with a label and a plastic trash bag) and yet supports the Leave No Trace aspect of geocaching. It can make a great, easily personalized gift for participants.

End the session with the reminder that the Boy Scout program is boy-led. Give them a certificate and a copy of the **Geocacher’s Creed**.

Encourage them to share their knowledge with the troop youth leadership, and to turn the planning and implementation of events over to them to the greatest degree possible.

Updated February 2006.

# ***Geocaching References***

## ***General Resource Information***

<http://www.geoscouting-info.com>

## ***The Geocacher's Creed***

<http://geocreed.info/>

## ***Geocaching Description***

<http://www.geocaching.com/faq/>

## ***Guide for Finding Caches***

<http://www.geocaching.com/about/finding.aspx>

## ***Guide for Hiding Caches***

<http://www.geocaching.com/about/hiding.aspx>

## ***Guide for buying a GPS unit***

<http://www.geocaching.com/about/buying.aspx>

## ***Glossary of Geocaching Terms***

<http://www.geocaching.com/about/glossary.aspx>

## ***Cache In Trash Out***

<http://www.cacheintrashout.org/>

## *Rules of the Game*

- All team members should stay together.
- Do not run. There is no need to get injured.
- Remember the principles of Leave No Trace, and do not tread on things you shouldn't (gardens, private property, etc.).
- Attempt to involve everyone on the team. Everyone should have a responsibility.
- Each team should have a troop guide (staff member) as its chaperone. Do not ditch the troop guide.

# ***Geocaching Rules and Etiquette***

## **Rule No. 1: Keep Safe**

- Stay far away from road traffic and railroad crossings.
- Don't place a cache higher than 6 feet or require any dangerous climbing to reach it.
- Don't require Scouts to swim to reach the cache.
- Public caches are often magnetic containers stuck onto electrical switch boxes. Common sense says to avoid these as well!
- Always enforce the buddy system.

## **Rule No. 2: Respect the Environment**

- Never bury a cache in the ground.
- Avoid sensitive ecosystems. Place caches so that they can be reached by existing trail access
- Don't place caches in archaeological or historic sites.
- Don't deface any object, natural or manmade.
- Don't hide caches in lightpost bases, sprinkler heads, etc.

## **Rule No. 3: Respect Private Property**

- Get permission from land managers to use parks, Scout camps, etc., for your events.
- It is unlawful to put caches on National Park land or national wildlife refuges.
- Local laws and policies vary so check with any relevant agency before placing caches.
- Caches in or near military installations are not allowed.
- Caches are not allowed on elementary and secondary school property.
- Avoid sites that could be deemed potential or possible targets for terrorist attacks, including but not limited to highway bridges, dams, government buildings, and airports.

## **Rule No. 4: Be a Positive Ambassador for Scouting**

As with all else we do, cache using the Scout Oath and Law.

## **Etiquette**

- Practice cache-in-trash-out (CITO). Always carry a trash bag and remove litter along your route.
- Follow Leave No Trace guidelines in the natural environment.
- Be careful of the area around the cache—don't trample the grounds, rip up sprinkler heads, etc., in your frenzy to find the cache.
- Follow all laws and regulations. Never enter private property without permission.
- Write an entry in the logbook at the cache.
- Cache items are there for fun and for trade. Try to leave something of equal value to what you take for yourself.
- Respect other visitors around the area.

## *The Geocacher's Creed*

When placing or seeking geocaches, I will:

- Not endanger myself or others.
- Observe all laws and rules of the area.
- Respect property rights and seek permission where appropriate.
- Avoid causing disruptions or public alarm.
- Minimize my and others' impact on the environment.
- Be considerate of others.
- Protect the integrity of the game pieces.