



Birchmere Campsite

Geocache Game



Introduction

The word “Geocache” comes from GEOgraphy (the land) and CACHE (something that has been hidden for later retrieval). Geocaching is a pastime in which people hunt out caches that have been left by other people. There are thousands of caches hidden around the UK and hundreds of thousands hidden around the world. The great thing is that caching can be done by anyone; all you need to do is hide a cache and then give other people clues to where it is.

In the Birchmere Geocache Game the clues are in one of two forms depending on which version you play.

- The Direct game tells you where the cache is to within 5 metres or so
- The Offset game gives you a starting GPS location and then a bearing and distance to the cache

The Scouting Programme

- Geocaching fits within the outdoors zone of the programme.
- It can be used to help teach young people skills in the use of map and compass and introduces them to bearings (including the use of leapfrogging and using features as a way of walking on a bearing) and to using pacing as a way of estimating distance.
- It introduces them to the use of GPS receivers and their limitations.
- It teaches them teamwork – especially when trying to locate the geocache

Safety & Guidance

There are some rules that the young people should be made aware of. These are to protect them and the wildlife on the commons. There is a flash card with this folder please use it to help you brief the young people.

From a safety point of view the young people must be made aware that the common is bounded by two very busy and high-speed roads and a third smaller and busy road. Please emphasise that they do not need to cross a road to reach a cache.

As far as the wildlife goes please point out to the young people that they are playing on the last piece of Surrey Heath remaining in the world. It is a fragile environment so ask them to follow the Country Code and in particular avoid ploughing through deep heather and bracken (none of the caches are hidden there). If they do stumble across a bird nest on the ground they must leave it alone.

Preparing for the Game

Equipment needed

You will need to provide each team with:

- Map
- Compass
- Pencil
- Notepaper or pad
- GPS receiver
- Bag of treasure
- The right answer card for the game they are playing

Since the game can mean the young people being off the campsite for half-day you should also ensure that they have appropriate clothing for the weather. You should also consider the need for medication, water and sun-screen.

Map

It is possible to play the game using a 1:25k map. However, the chances of finding more caches is much higher if you use the large-scale maps available from the warden. Please note that these maps should not be written on.

Compass

You'll need to use a Silva Ranger (or similar) compass.

GPS Receivers

The campsite has two Garmin GPS receivers available for use. These have been set up correctly – please do not alter the settings. If they are changed, please let the warden know.

If you are using your own GPS it should be set to use British National Grid and the OSGB datum. Please refer to the manual for your GPS for instruction in how to do this.

Bag of Treasure

In geocaching part of the fun is finding out what is in the cache. Caches come in many forms and on Birchmere we have swap caches (where you swap one of your treasures for the treasure in the cache).

Treasures should be small (erasers, key rings, badges, pencils etc), non-food and safe for young people.

Logbook

Each cache has a logbook. The young people should write their unit, names, the date and what treasure they took and what they replaced it with. For example:

Maverick Explorers - Aaron, Emily and Matt - 19/5/10 - Took eraser and left a badge

Skills needed

You should check that the young people can:

- Set the map using the land and/or a compass
- Use grid references correctly
- Take a bearing and follow it using a compass
- Estimate distance using their own paces.

- Can read GPS grid references, translate these onto a map and know how to use them (see below)

GPS Grid References

GPS' typically give 12 digit grid references. If you have your GPS set up to use British National Grid these will look like the familiar 8-digit references with four extra numbers; two for the Eastings and two for the Northings.

As an example TQ 06817 58296

The "TQ" represents the Ordnance Survey sheet.

The first group of numbers "06817" represent the Eastings

The second set of numbers "58296" represent the Northings.

The extra digits represent the greater accuracy you can obtain with a GPS; without a GPS you would give the grid reference as TQ 068 582 which is accurate to within 100m. With a GPS you can theoretically increase accuracy to within 5m though in reality it is closer to 10m.

Special note – some of the young people may notice that the grid reference they get standing over the cache is a couple of digits out compared to the one given to them (e.g. TQ06818 as opposed to TQ06817). This is down to the strength of the signal fluctuating. This can be caused by cloud, high-level mist, tree cover, battery power etc.

How to use GPS references

The young people should first navigate to the 8-digit reference point. They can work this out by ignoring the last two digits in each group. Thus TQ 06817 58296 becomes TQ 068 582.

Once there they need to note their precise GPS reference.

If the first group of numbers is less than the target (e.g. 06816) they need to move East. If it is more (e.g. 06818) they need to move West.

Once at the correct Easting they need to look at the second group of numbers. If it is less (e.g. 58295) they need to move North. If it is more (e.g. 58297) they need to move South.

Once they can see the target reference on the GPS receiver they will be within 10m or so of the cache. They'll need to have a thorough look around to find it.

Playing the Games

Divide the young people into teams. For safety you may want to have no less than 4 young people in each team.

Make sure each team has the right answer card for the game they are playing.

Make sure the teams mark the correct location for each cache on their maps before they start

Overview

There are ten caches located around Wisley Common. The objective is to find as many as possible. If you wish you can specify particular caches that have to be found or set a time limit. None of the caches have been buried (though some may be in old rabbit holes) and none are more than 1.5m above the ground.

To prove that they have found the cache the teams mark their answer card with the cache letter and name; these can only be found by locating and opening the cache.

The Direct Game

Preparation

You'll need as many answer cards as there are teams. Write the GPS location of the caches on each card.

Playing

Pick the first cache location

Use the map to get close

Use the GPS receiver to get closer still

Once you are at the right location have a good look around for the cache – it could be in the branch of a tree, under some roots, down a rabbit hole or in a bush

Make your entry in the logbook and swap treasures.

Pick the next cache to find.

The Offset Game

Preparation

You'll need as many answer cards as there are teams. Write the GPS location of the caches on each card.

Write the “from” GPS location, bearing (these are given as magnetic) and distance from the location on that bearing (these are given in meters) to the cache

Playing

Pick the first offset location

Use the map to get close

Use the GPS receiver to get closer still

Use a compass to shoot the bearing

Use paces and leapfrogging to walk on that bearing for the right distance

Once you are almost at the right location have a good look around for the cache – it could be in the branch of a tree, under some roots, down a rabbit hole or in a bush

Make your entry in the logbook and swap treasures.

Pick the next cache to find.

Guidance and Safety Notes

1 - Follow the country code

If you don't know it, ask!

2 - The roads around the common are dangerous

You do not need to cross any roads to find the caches

3 – All of the caches are located on the common in public areas

This means you do not need to go through gates or over fences or roads or into farm yards, gardens or car parks.

4 – Avoid walking through thick heather and bracken during May to August

This is when the ground nesting birds are tending eggs. Leave on the ground any nests or eggs you find on the ground.

5 – Leave the cache as you find it

Put it back exactly where you found it with the lid securely on.