



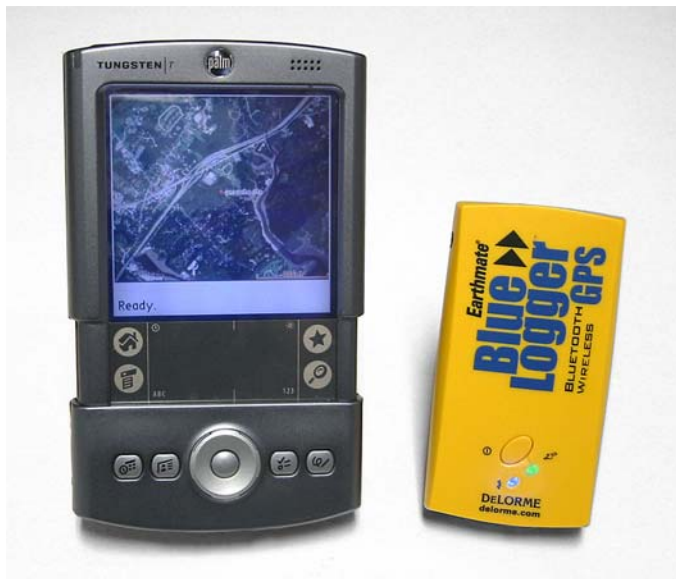
## Geocaching with Earthmate® Blue Logger™ GPS and a DeLorme Handheld Mapping Application

Written by  
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### Overview

Geocaching is a popular hide and seek game for GPS users. Hiders place a cache at an approved location and provide clues to the seekers. Seekers use the hider's clues (coordinate information that is shared via the Internet—for some geocache locations, visit [www.geocaching.com](http://www.geocaching.com)) to find the cache. The cache usually contains a variety of prizes for the successful seeker (seekers are encouraged to use the “take one, leave one” policy on prizes in the cache).

By using Earthmate Blue Logger GPS along with a DeLorme handheld mapping application (such as XMap Handheld Pro or Street Atlas USA Handheld), you can track your progress while you search for the cache using street maps or even aerial/satellite imagery. Once you return home from the geocache adventure, you can download the points you logged with your Blue Logger GPS and view them in a DeLorme mapping application. This document will describe how you can use Earthmate Blue Logger GPS in conjunction with your Palm OS/Pocket PC handheld computer to geocache. If you have XMap 4.5 (or greater) or Topo USA 5.0, you can even export Aerial Data Packet information to your handheld computer and view your cache location on aerial or satellite imagery maps (*XMap Handheld Pro only*).



**Figure 1:** Using Blue Logger GPS with XMap Handheld Pro on a Palm OS handheld computer.

### Setting Up the Blue Logger GPS Device

In order to create a GPS log that contains all of the points you encounter while geocaching, you must first assign the desired logging preferences in Blue Logger Manager (the software that accompanies Blue Logger GPS). With Blue Logger Manager, you can set up Blue Logger GPS so that it:

- **Logs only when traveling faster than a certain speed, in either time or distance intervals**—This option is very helpful for determining when a driver is speeding.
- **Logs only when traveling slower than a certain speed, in either time or distance intervals**—This option is helpful for determining when a driver has stopped or is stuck in traffic.
- **Logs at any speed, in either time or distance intervals**—This option is helpful when you want to see all of the points for a trip, regardless of speed or distance.

For a given logging session, you can select any combination of these options (one, two, or all three). For this geocaching scenario, the preferences were to log points as standard data and at a distance of every tenth of a mile.

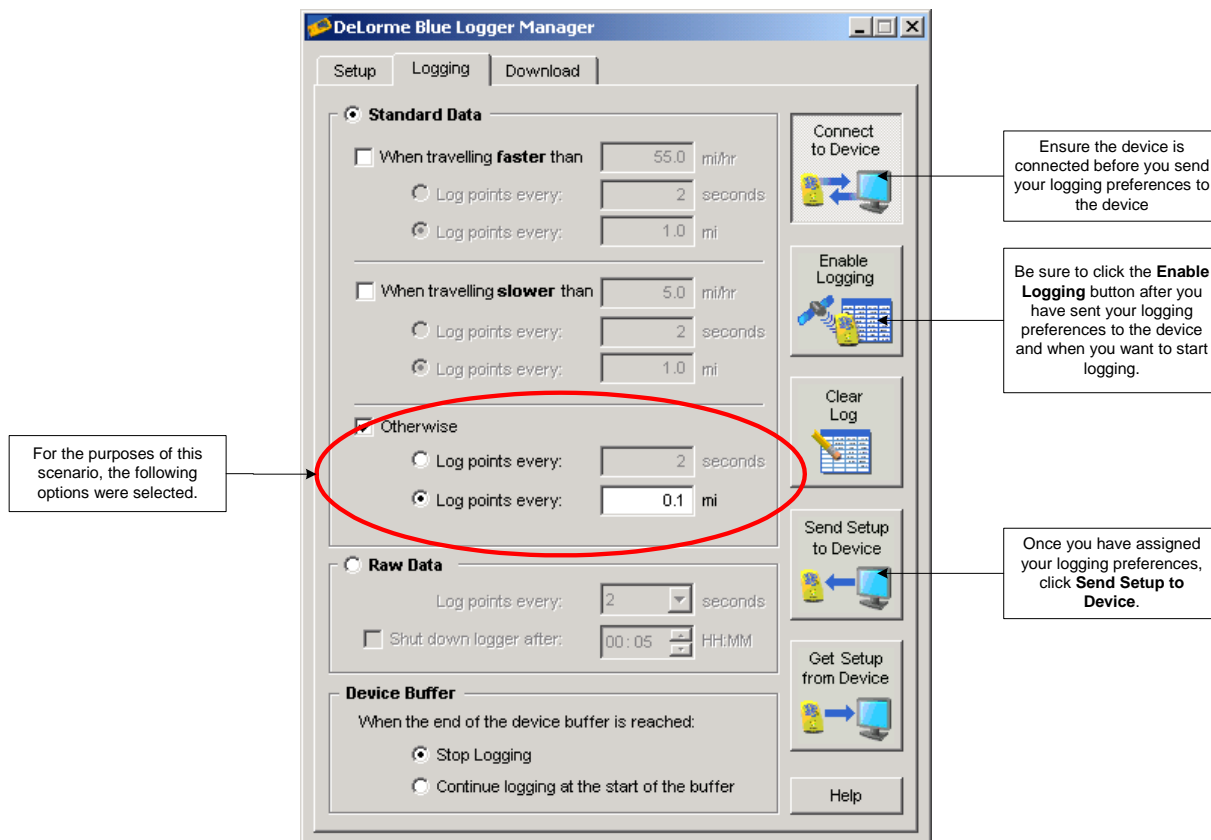


Figure 2: Using Blue Logger Manager to assign logging preferences.

## Geocaching with Blue Logger GPS and a DeLorme Handheld Mapping Application

Once you have wirelessly connected the Blue Logger GPS to your handheld computer, you can perform a variety of tasks to help you reach the geocache site.

### To Find a Coordinate Location

If you know the coordinates for each of the clues in your cache, you can find the coordinates on the map using the **Go To Position** functionality in the DeLorme handheld mapping application.

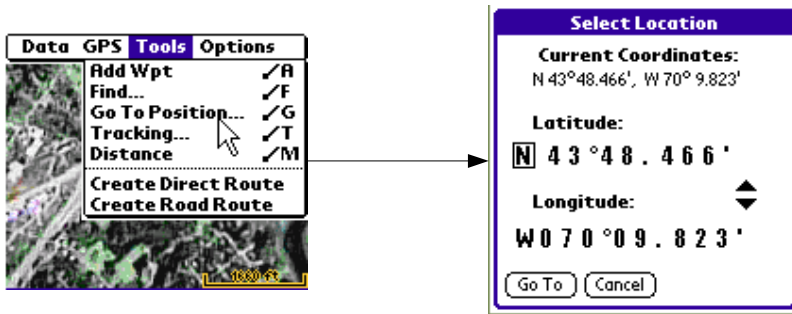


Figure 3: Using XMap Handheld Pro on a Palm OS handheld computer to find a coordinate position with the Go To Position option in the Tools menu.

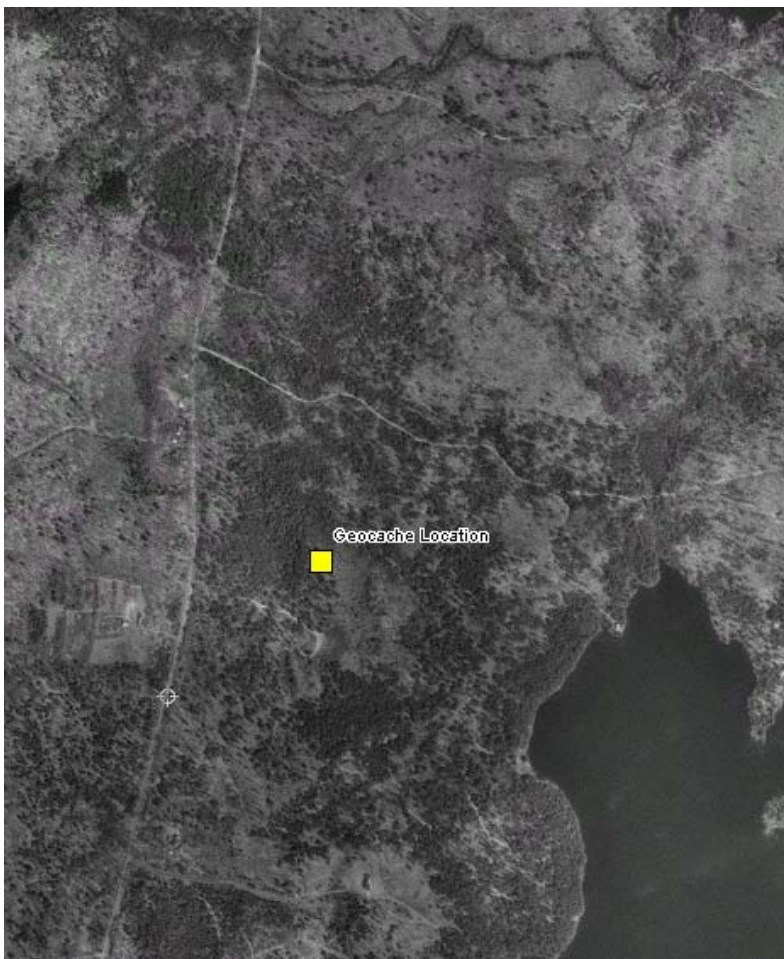
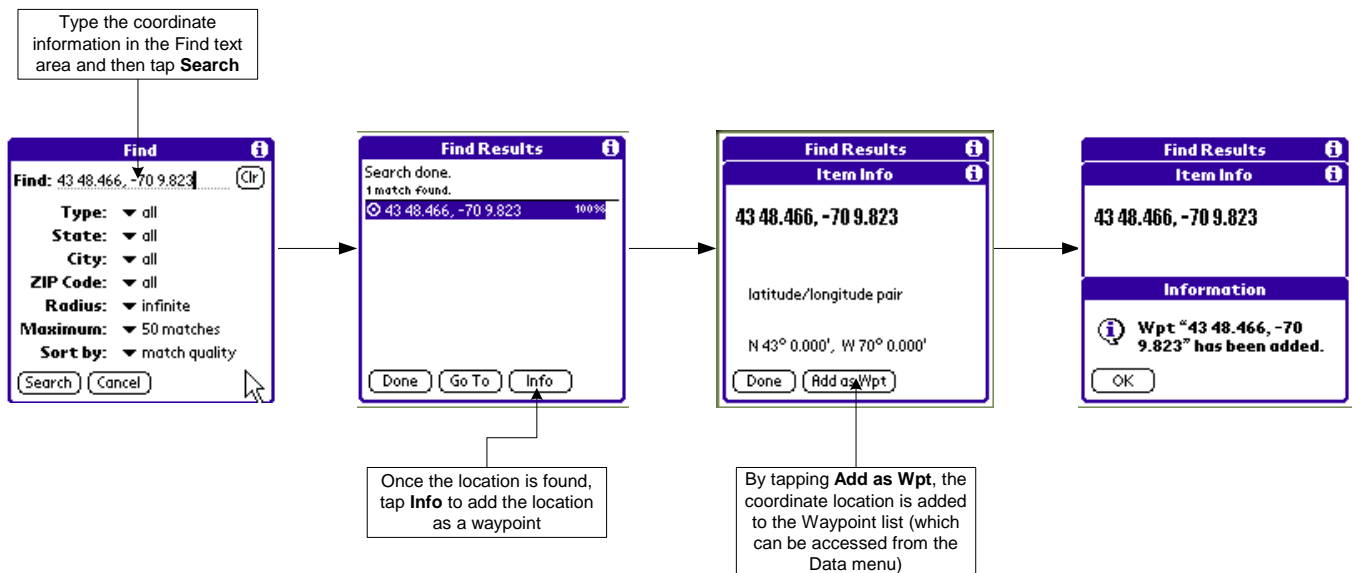


Figure 4: By viewing the geocache location as a point on the map, you can see the closest roads to the location.

## To Create a Route Using a Coordinate Location as a Start/Finish Point

If you want to create a route from your current location to a coordinate location in a clue, you can add the coordinate location as a waypoint and use that waypoint as the Start or Finish point of your route. You create a route using the Create Road Route or Create Direct Route options in the Tools menu.



**Figure 5:** Using XMap Handheld Pro on a Palm OS handheld computer to find a coordinate using the Find option in the Tools menu. Once the coordinate position is found, you can add it as a waypoint which can then be used as a Start or Finish point when creating a route.

## To View Your Position in Real Time on a Map

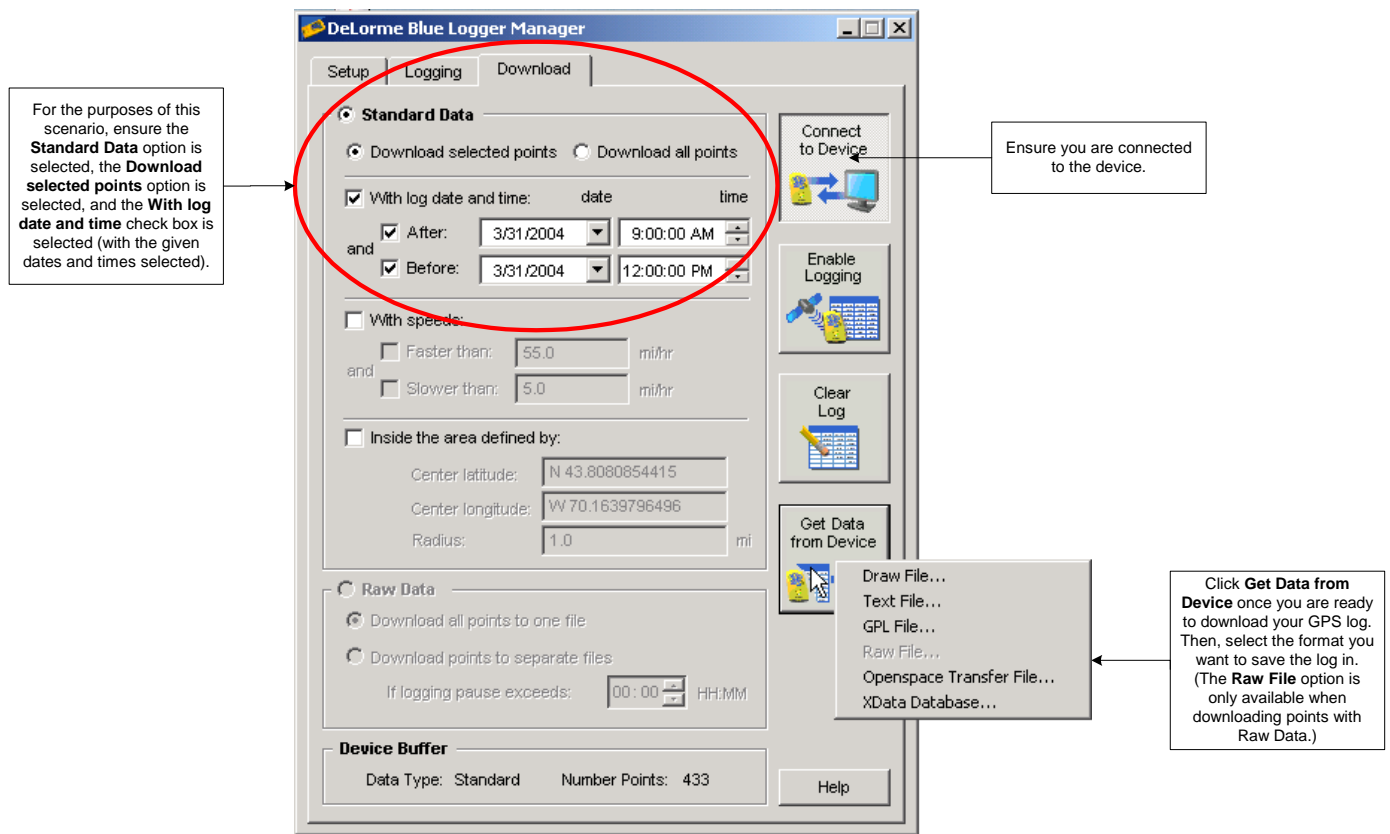
Once you have established your GPS settings in the DeLorme handheld mapping application, you can connect to the device quickly and easily using the Connect option in the GPS menu. Once the device obtains a 3-D fix, your current position displays as a green circle on the map.

## To Track Your Progress on a Route You Have Created

While connected to Blue Logger GPS, you can use your DeLorme handheld mapping application to guide you to your destination. To track to a route, select the Tracking option from the Tools menu, select the route you want to track against, and then select to Start Tracking.

## Once the Geocache is Over

Once you are finished logging, open Blue Logger Manager to stop the logging process (click the **Enable Logging** button so that it is no longer activated) and download the log. You can select to download all of the points on the device or only select points (based on additional criteria you assign).



**Figure 6:** Using Blue Logger Manager to download the log file.

You can save the GPS log as a:

- **Draw File**—Lets you view the logged points as symbols on the map. The symbols are differentiated based on GPS status and the logging preferences (time, speed, and distance) that were assigned in the Logging tab.
- **Text File**—Lets you view the logging information in a .txt-compatible program such as Microsoft Excel, Word, Notepad, or WordPad. The file contains the date, time, latitude, longitude, elevation (in feet), heading, speed (mph), GPS status, and log type for each point that was logged.
- **GPL File**—Lets you play back the log in a compatible DeLorme application, labeling the points based on GPS status.
- **Openspace Transfer File**—Lets you view the logged points as symbols (indicating GPS status) on the map. Openspace Transfer Files can be imported into XMap/GIS and then classified, symbolized, and labeled to your specifications.
- **XData Database**—Lets you view the logged points as symbols on the map. The symbols are circles that represent GPS status.

You can then import the file into a compatible DeLorme mapping application (such as Street Atlas USA 2004 Plus, XMap 4.5 (or greater), or Topo USA 5.0) and view the logging information as points on the map.