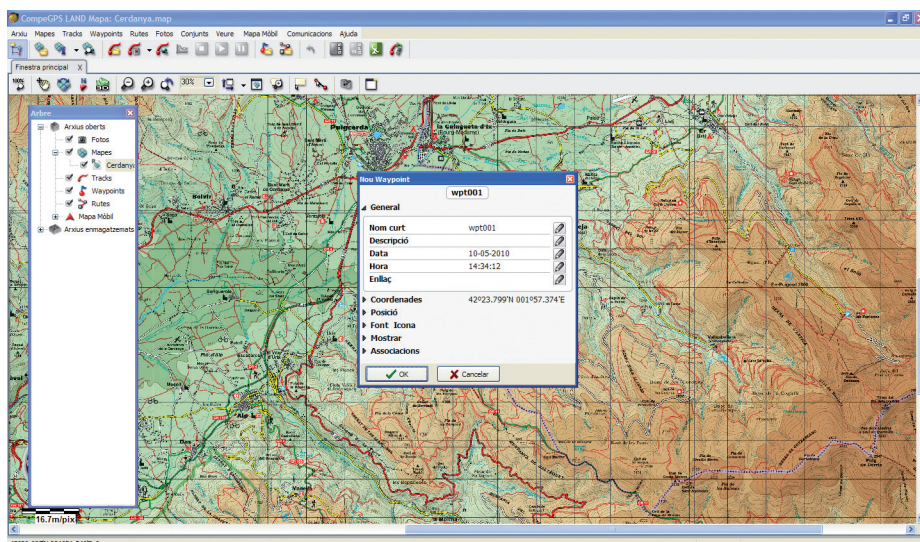# Waypoints

Waypoints are electronic marks that identify a particular point on the ground. We consider them as a basic of GPS navigation. From the moment you enter the coordinates of the point you want to reach in the receiver's memory, you already start the navigation with your GPS. CompeGPS Land is the most effective tool for working with these reference points, both when download waypoints from the GPS (in order to locate them on a map), as introduced in the device points outlined in the map and by which we want to pass during our next trip. And moreover, if you like geocaching,

CompeGPS Land is the ideal program to locate the places where the treasures are hidden and prepare the best approach to get them.

Create waypoints directly on the map

Suppose we decided to go look for a treasure hidden in some place and you only know the coordinates of this waypoint (for example, when down-loaded from www.geocaching.com).

The first step is to open a map from this area with the software (in pre-vious chapters we explained how to get a topographic map, to run it on CompeGPS Land and, if necessary, to calibrate it). Once loaded we go to the **menu > waypoints** and then **New Waypoint** (Picture 1).
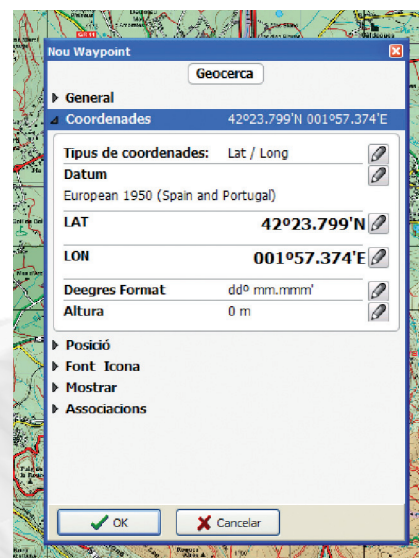
A window appears with the properties of the waypoint that we just created. We'll see six different tabs: General, coordinates, position, font icon, and Show Associations (Picture 2). Select the **General** tab, and click on the black triangle to see all the options offered. In this menu, you must click on the pencil icon (icon1) to activate the selected square and write additio-nal information.

This way we can rename the waypo-int, add a small description, or change the date and time of creation. **Coor-dinates** tab gives access to a menu that lets us write the exact coordina-tes of the point. By default the pro-gram sets the waypoint located in the center of the screen, and these coor-dinates are those which are displayed at first. The pencil-shaped icon allows us to modify them.

Picture 1.

You must consider several fac-tors when writing the coordinates. Let's first choose the type of coordinates we want to use. The 2 most common are **Lat / Long** (latitude and longitude, with coordinates in degrees and minutes, e.g. 42 ° 23,799 ') and **UTM projection** (with coordinates in meters, for example, 414,092). The next tab Datum is the for-mat in which one coordinates were ob-tained.

In our example, as we downloaded co-ordinates from the Website www.geoca-ching.com, the datum is WGS84. We can also modify the format to enter coordina-tes, if it will be in degrees with decimal minutes and seconds, etc. ... and if you want, you can finally indicate the height of this point.

Picture 2.

Icône 1 et 2.

Font icon and **Show** tabs allow you to customize the waypoint by choosing how we want to display it inside the main window of CompeGPS Land (Picture 3) from the image point characterizing the waypoint up to the colors or fonts.

Picture 3.

Once the waypoint is setup, click on OK to close the edition. From the menu **>Waypoints**, now all options will appear as enabled. We can for example store the defined waypoint by the option **Save as waypoints...** into the desired folder with the name we like. If we make any changes, **Save waypoints** will allow us to save them (Picture 4).
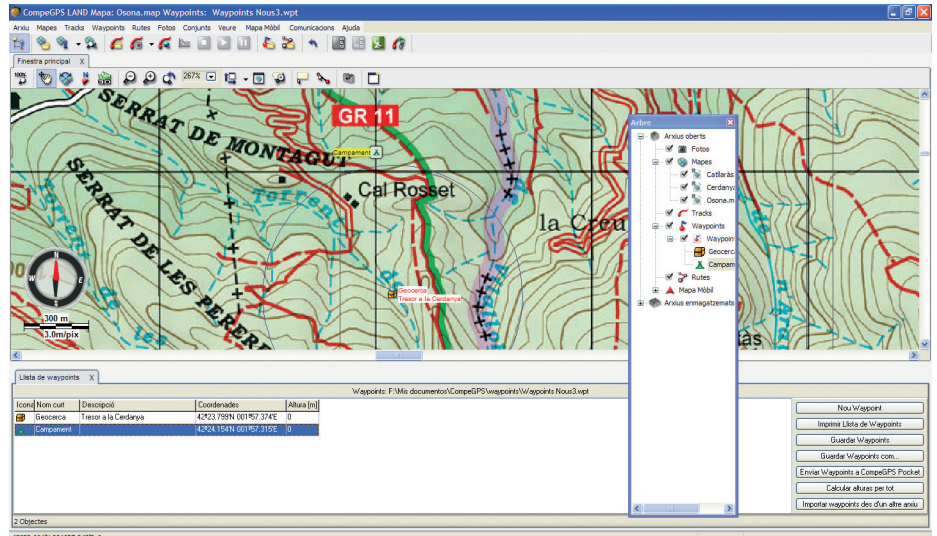
Send waypoints to GPS

If our GPS is a TwoNav Aventura, Sportiva, an Evadeo or a TwoNav iPhone, Compe-GPS Land will automatically detect it once connected to your computer. The device will appear inside the **data tree**. If you do not have that window open, you can activate it by clicking **Data Tree** from the main **menu > View**.
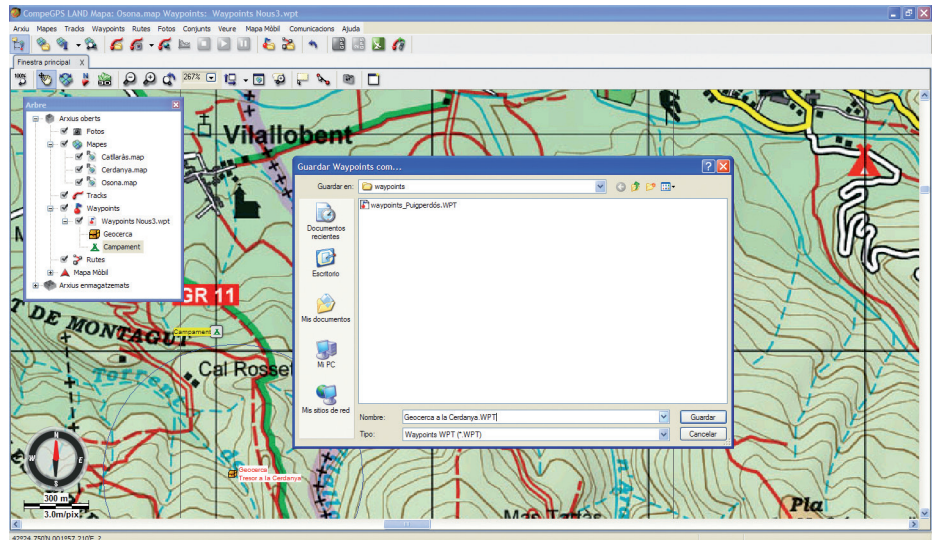

Picture 4.

One advantage of working with these devices is that they offer convenience and easiness when communicating and transferring data. To load the waypoints that you previously saved on our computer, just open it from CompeGPS Land (From **> Waypoints** menu, choose **Open Waypoints File** option or do it directly from the hotkeys (Ctrl + W). Once opened, drag the file from the **data tree "Open files"** to the waypoints folder of your receptor (Picture 5).

If you have another GPS, you still can use the option **Send Waypoints to the GPS** from **> Communications** menu.
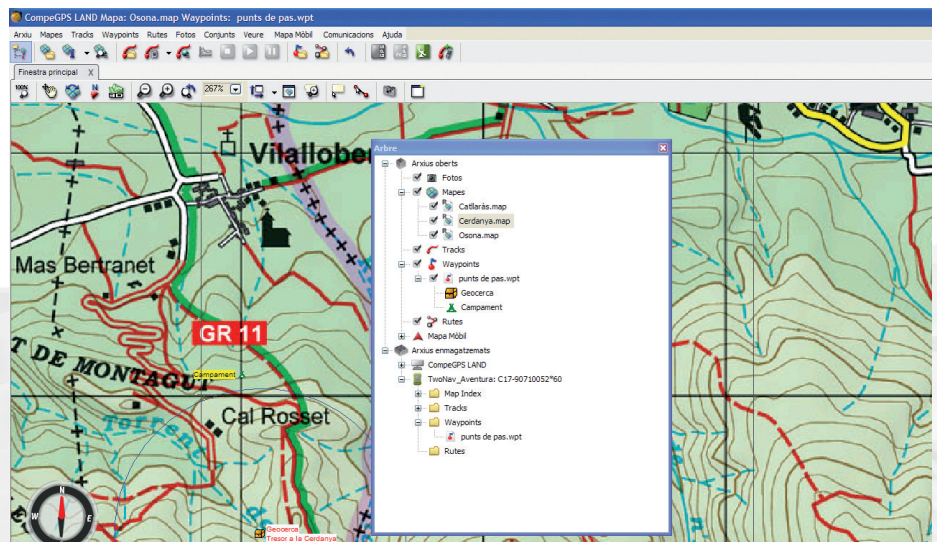
Your GPS is ready!

Picture 5.

Download waypoints from the GPS

It often happens that during a trip we want to mark a waypoints into our GPS to be able, then at home, to check their positions on the digital map. That can be useful for example to mark the points of a roadbook or to record the spot where we took a picture, to quote some examples.
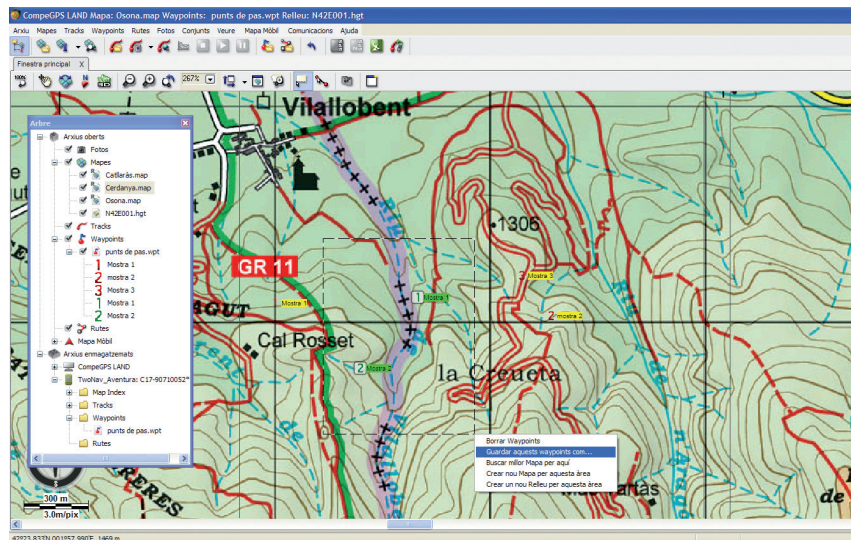
With TwoNav Aventura, Sportiva, TwoNav iPhone or Evadeo we just need to double-click on the waypoints file you want to open (from the data tree). If our GPS is a different model from the one above, you must choose the option **Download GPS waypoints** from **> Communications** menu.

Save several waypoints in different files

Sometimes we want to keep the waypoints that we have downloaded from the GPS into different files. For example, we want to diffe-rentiate places where we collected some sam-ples, and the most interesting places that we will recommend to a friend. CompeGPS Land allows us to do it in the easiest way.

From **> View** menu, choose **Activate the selection Mode** (or click the icon (icon2) from panel tools) and by keeping the left mouse button pressed, draw the rectangle connecting the waypoints you are interested in isolating from the rest. By releasing the button a menu will appear (Picture 6). You can choo-se the option **Save Waypoints As...**

Picture 6.