Create your routes

Last month we talked about the waypoints (crossing points), this month we will talk about the routes, which are nothing more but waypoints linked by straight sections. In the hiking or mountain biking routes, where the terrain is uneven and there are landscape elements that hinder the pace and force us to deviate from our itinerary, routes are not the best option to follow the desired path, not unless the path contains tenths of waypoints or the relief will enable us to pass along an imaginary straight line. In contrast, in other outdoor activities like



water, air sports or also in combination with a track, routes are an exceptional tool for long trips in a straight line. CompeGPS Land has the resources necessary for planning, editing and transfer to GPS the routes created on the computer.

HOW TO MAKE A ROUTE:

First we need to prepare a route is to have the coordinates of the waypoints needed. In our example we want to prepare a journey to Núria Valley (Catalonia) passing through all the peaks. Run the program and open the map of 'La Vall de Núria' (in Chapter 3 we explained how to obtain and work with maps). If we have the list of crossing points through which we pass, we load the waypoints file (Waypoints menu> Open Waypoints File). Right-click on the waypoint where we want to start the route (in our example is the shelter) and choose from menu 'New', the option 'Start Route Here' (Figure 1).

A message will remind us that we can click with the left mouse button on the map to add waypoints or click directly on a waypoint to select and to add a new waypoint just afterwards. To exit from route edition just press the '**Esc**' key. It will also open the tab '**Waypoint List**' of the route, where the first point in our case is the shelter (**Fig. 2**).

We will also see how the mouse cursor has become a cross, followed by a straight line to the selected waypoint. We look for the next waypoint where we want to pass through, in our example, the sanctuary. To move the map, just approach the cursor to the edges of it. When the cross becomes an



Figure 1







arrow, click on the map to advance in that direction. Make a left-click on the waypoint you want to become the next waypoint of the route. You will see that the two points are linked with an arrow (indicating the direction of the route) and that the new item is automatically added to the list of crossing points of the route (**Figure 3**).

This list indicates the order of crossing points, the graphic chosen for the icon, the name of the waypoint, the distance respect to the previous waypoint (partial distance), the total distance (sum of all partial distances) and the bearing to follow. The contents of this list are totally configurable and let you show the data that interest you most. We will do this by clicking the right mouse button on the list. From the menu that appears choose '**Select Fields' (Figure 4)**.

It will bring up a window with two columns. In the left column we see the fields that we have **available** (coordinates, altitude, description ...) and in the right column, the fields that you have already **selected**. Between these columns there are arrows. The arrow pointing to right will add the selected field from the left column to the right column, and the arrow pointing to left will delete the selected field of the right column (**Figure 5**).

Continue developing your route and click on the other waypoints on the map in the order you want to make the trip (Figure 6). Una vez clicado el último punto seleccionaremos la tecla 'Esc' para salir del editor de la ruta. Afin d'enregistrer les différentes modifications apportées, faîtes un clic droit sur un des points de cette route. Choisir alors l'option 'Enregistrez Route sous...' afin de choisir l'emplacement et le nom du fichier.

Once clicked the last point, exit the route editor by pressing the key 'Esc'. To save the route and keep your changes, do right-click on the route. Choose '**Save Route as ...**' to choose the folder where you want to save the route and specify a name that identifies it. It will create a file with extension *. rte. If you do not have the crossing points, you can create them as long as you make the route. In the **menu >'Routes'** choose **>'Create New Route'.** On the map, do right-click over the points where you want to pass trough and see how it traces the route with arrows linking the various cros-













sing points. In the previous chapter we explained how to access the properties of these points, change the names and other features.

HOW TO EDIT A ROUTE:

Once stored the route you can verify it on the map. It can help you to avoid any obstacle and ensure a clear pass through specific places you are interested in or add other new crossing points. Open the map and the route (on the menu 'Routes > Open Routes'). Do right-click on the route and, in the appearing menu, choose 'Edit Route'. In our example we want to make the route pass through 'Ortigas plain', so we add a crossing point between waypoints 2 and 3. Once we entered in edition mode, we do right-click on the waypoint 2. By moving the mouse around the screen you will see how the cursor become a cross and is linked to the waypoints before and after (Fig. 7).

We look for the place where we want to locate the new crossing point and we do left-click on the map. The new item will appear in the list of '**Route Waypoints'**, which you can edit as explained last month. If we want to eliminate a crossing point on the route we will have to edit the route by doing right-click on the desired crossing point (on the map or the list) and choosing the option 'Cut' from the appearing menu (**Figure 8**).

PROPERTIES OF THE ROUTE:

CompeGPS Land has two tools for sorting, editing and working with routes: the properties of routes and the route list. The routes list (menu 'Routes' > 'Routes List') allows you to access the different routes with which we want to work and move quickly from one to another. If you click on one of the routes in the list, you will see a menu where you can choose from several options, which include the possibility of accessing the properties of the route (option 'Route Properties'), the possibility to approach to a determined route (option 'Zoom here'), or to see if the crossing points have height data or graphical (option 'Graphic') (Fig 9). If we access the properties of the route we can change the colour and thickness of the arrows that mark the route and direction. If we want to change the direction of the path, we can do by choosing the option 'Reverse Route' from 'Tools' menu, which appears when you do right-click on the map.



Figure 6











SEND ROUTES TO GPS:

CompeGPS Land can automatically detect TwoNav Aventura GPS, TwoNav Sportiva GPS or Evadeo GPS when they are connected to the computer. The **'Data Tree'** will show the device detected. To download the route we have stored in our computer we just need to open it (menu **>'Routes', option >'Open Route'** or the combination of hot keys **'Ctrl + R')** and in the 'Data Tree' window, drag the file to the folder 'Routes' of the device.

If we have another type of receiver, we can choose the option 'Send Route to GPS' from 'Communications' menu or, in the data tree do right-click on the route and choose 'Send route to GPS '. In many GPS the routes are numbered so it can be possible that you are asked to introduce a route number. Just start from one and go up with consecutive numbers.



