HOW To – Import POIs to Osmand
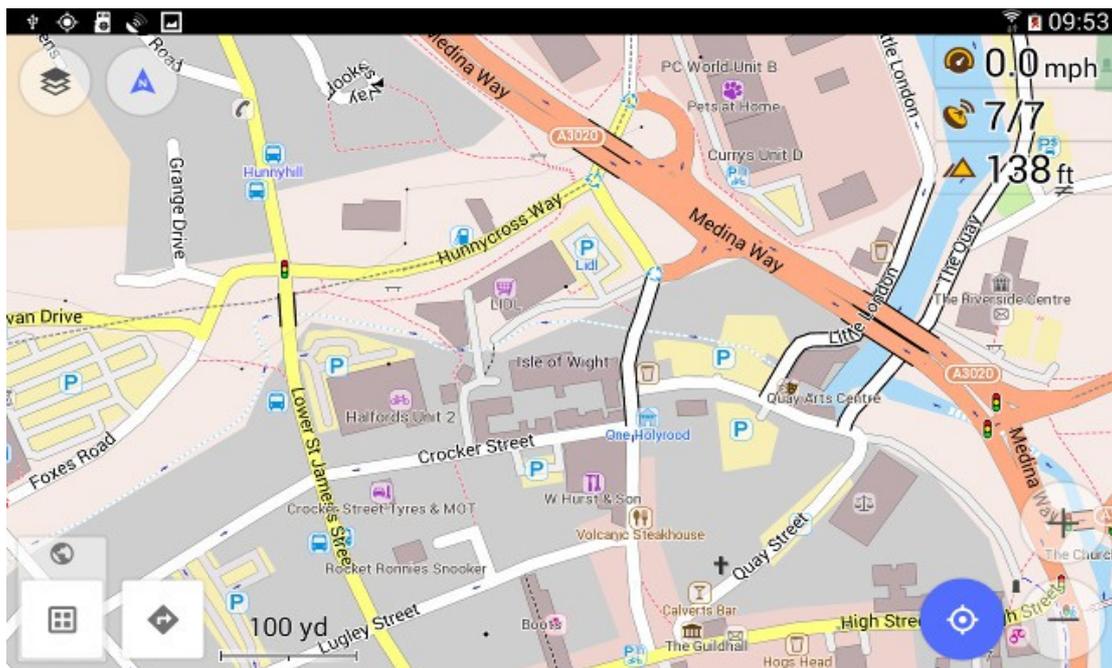
Note: This How-to has been written for Android devices. I don't have an iPad or iPhone, so haven't been able to verify a similar process on those devices. Also, the iOS version of Osmand currently lags behind the Android version in terms of features (no Navigation options as at July 2015, for example)

For those that don't know, Osmand is an off-line mapping application for Android and iOS devices.

It started life as a way of displaying Open Street Map files off-line on a mobile device so you could, for example, carry all of Western Europe around in your pocket at a superb level of detail - this screenshot of the centre of Newport, Isle of Wight as an example.

Osmand is available in two versions (Free and Paid-for). There is no difference between the two versions other than that the Free version has a limit of 10 Downloads (Maps, Voice files etc). The paid version is €7 – a one-off fee with no recurring payments.

In addition to displaying maps at a superb level of detail, Osmand also has built-in routing and navigation features, including turn-by-turn voice navigation, lane and turn warnings etc. I am recently back from a 2,000 mile trip through Germany, France & Belgium using Osmand as my sole navigation and mapping source (no Satnav or paper maps), and it didn't put a foot wrong.

Osmand draws on and displays Open Street Map POI data, which is great if you are looking for the nearest Petrol Station for example but not quite so useful if you want to find a rural lay by on the Isle of Wight to wildcamp in!

Is is possible to import user-defined POIs into Osmand, but it's a fairly complex process and they just end up lumped together in a single group called, er, "user-defined", and displayed as a rather uninteresting orange disk.

A much better approach is to use Favourites.

Favourites have several advantages over User-defined POIs:

1. Favourites can be grouped together into Categories
2. Each Category can be assigned a different colour
3. Categories can be turned on and off at will

This makes Favourites a much better way of displaying POI sets such as the Wildcamping ones.
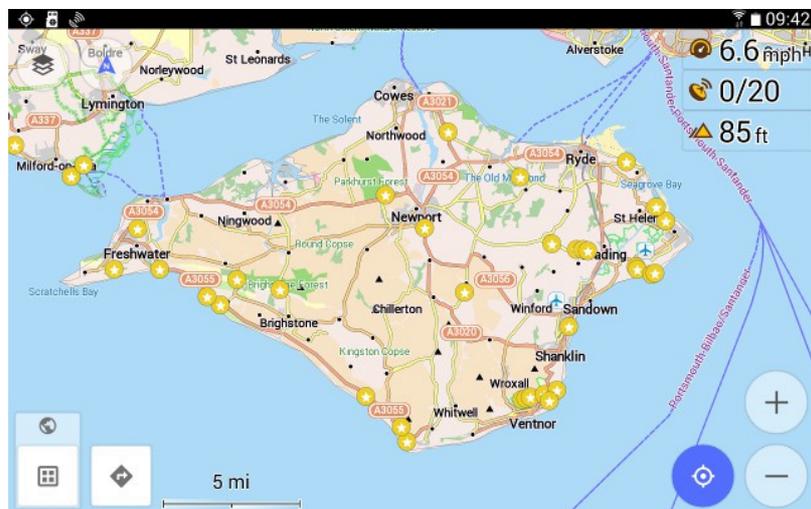
Osmand imports Favourites using the GPX (GPS Exchange) file format and, guess what? Amongst the various Wildcamping POI files you will find ones called "**wild camp.gpx", "tap.gpx" etc.** to import these into Osmand, use the following steps:

1. Force Osmand to Stop:

   ○ Close Osmand (if it was open)
   ○ Tap on the Android "settings" menu
   ○ Tap on Application Manager
   ○ Scroll down the list of applications until you find Osmand and tap on it.
   ○ Tap the [Force Stop] button
   ○ Tap [OK] when it warns you that it may cause errors.

2. Rename the file you wish to import to **favourites.gpx** this is important – Osmand *only* looks for and imports favourites contained in a favourites.gpx file.

3. Copy this favourites.gpx file across to your android device, and drop it into the root of the Osmand installation folder where Osmand stores all its maps etc. *Overwriting any existing favourites.gpx file.* On my device, favourites.gpx is saved in the following location, though this may vary depending on whether you have told Osmand to store map files on an external SD Card, for example. You will probably have to poke around with a file manager app to locate the correct directory.
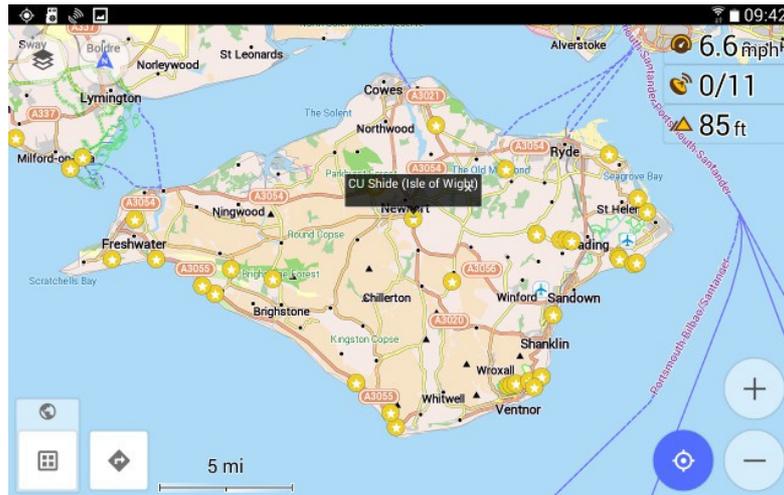
   Computer\[my device]\Card\Android\data\net.osmand.plus\files

4. Restart Osmand

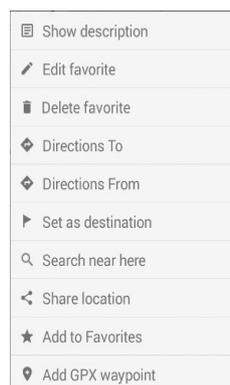Now a map of the Isle of Wight will look something like this:

Each gold dot is a Favourite. Long-Press on one, and a pop-up will show you more details:

The "CU" at the start of the name is the usual wildcamping shorthand for Carpark Urban.

Tap in the Black box, and Osmand will bring up a menu:

Show Description will include the Google Maps streetview URL and other comments (such as "narrow lane, unsuitable for RVs"). Unfortunately, Osmand won't currently open the http:// link directly.

Note the options for Set as Destination, Navigate To, Search near here etc. All very useful stuff!

Importing additional POI files into Osmand

So far I have just covered importing the main **wild camp.gpx** file as Osmand favourites. The procedure for importing additional POI files is identical. The main thing to note is:

> *Osmand will only **ever** look for a single file called **favourites.gpx***

So, if you have imported **wild camp.gpx** by renaming it and copying it over to Osmand, if you then want to import, say, **pub stop.gpx** then this, too, must first be re-named to **favourites.gpx** and copied across to the Osmand installation directory ***overwriting the previous favourites.gpx you copied there***. Force Stop Osmand and, when it re-starts, Osmand will read this new favourites.gpx file and merge its contents with any existing favourites.

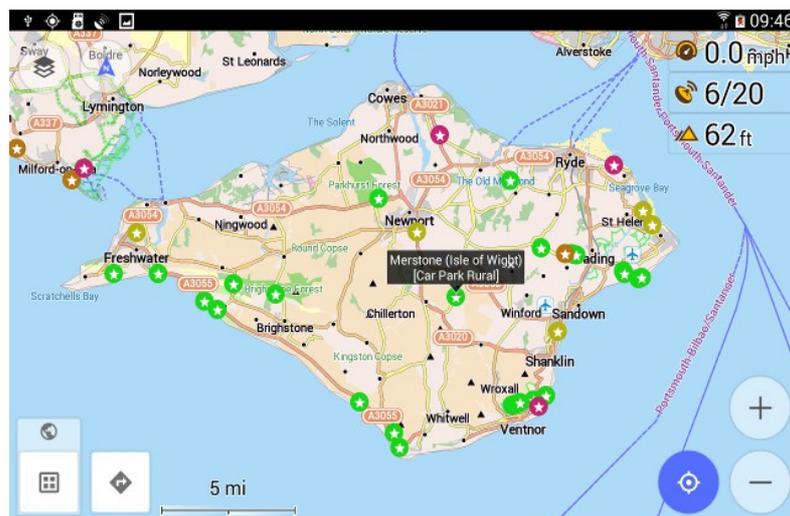**Making Wildcamping POI files more useable**

As mentioned earlier, favourites within Osmand can be grouped together into Categories, each Category can be assigned its own colour, and Categories can be turned off and on at will.

I have written a program which takes the wildcamping POI files, and adds in this additional information.

Unfortunately I cannot make the resulting GPX POI file available
as it is Copyright and I respect copyrighted material.

Instead, what I would like to suggest to Admin at wildcamping is that they include these additional 'elements' in the various GPX files extracted from the POI database, as it makes them *much* more useful to Osmand users.
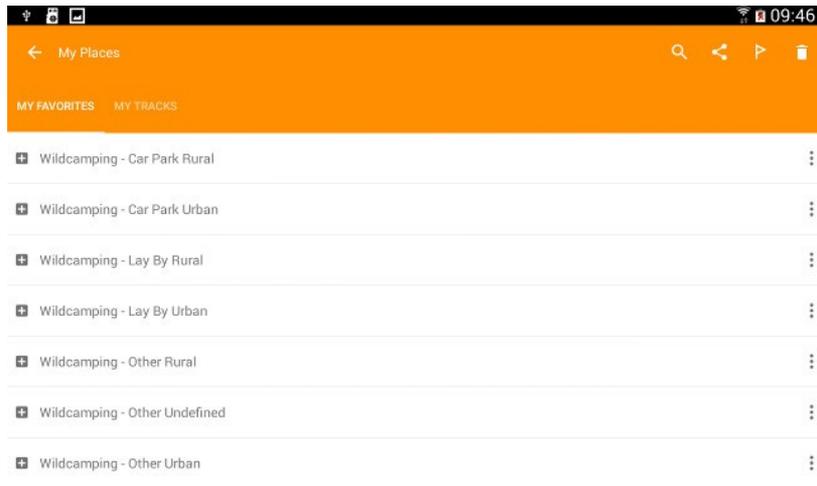
Once re-processed and imported into Osmand, my favourites now look like the image below. You'll notice that each category of POI (Car Park Rural, Car Park Urban etc.) is shown in a different colour and now, when you Long Press on a POI the CR, CU, LR codes have been converted into something a bit more readable [Car park Rural] in this example.
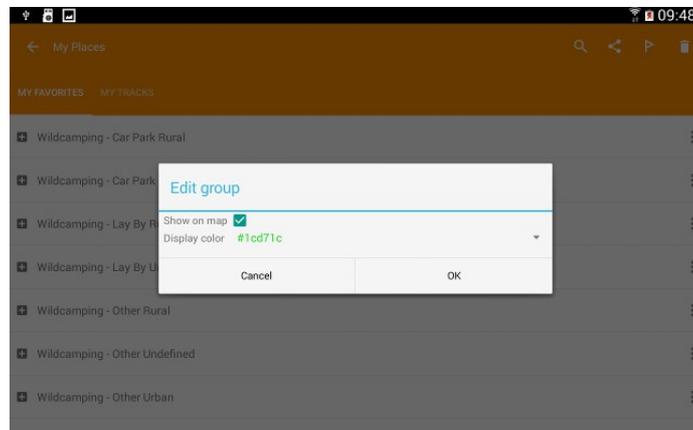

Open up the Favourites screen from within Osmand:

- Tap on the 'menu' button (4 dots in a square – it is in the lower left-hand corner of the screen-shot above)
- Tap on the 'layers' menu (3 horizontal lines one above the other)
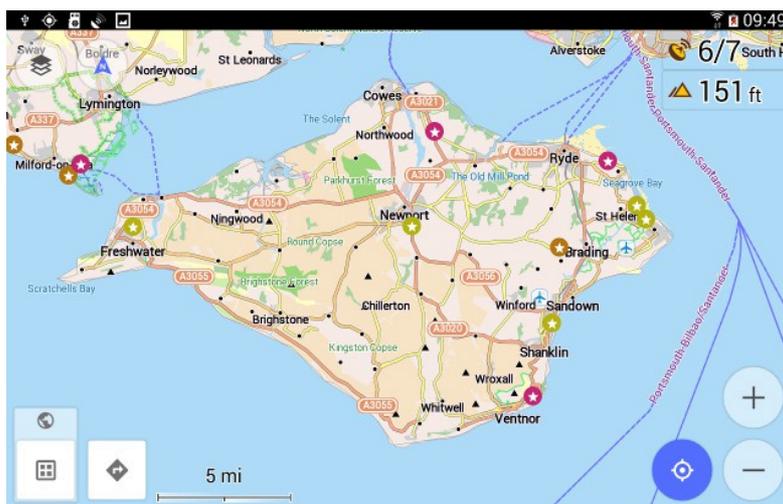- Tap on 'My Places'

And you'll see the POIs have now been grouped into Categories:

Tap on the '3 vertical dot' icon at the right-hand edge of each Category, and you'll get the following menu:

Note the check box next to "Show on map" - this can be used to choose whether that Category is displayed or not. So, if I turn off the [Car Park Rural] category, my map now looks like this:

The technical bit....

All I have done is to edit the existing GPX XML elements, which look like this...

```
<wpt lat="55.849981" lon="-2.380408">
      <name>CR Abbey St Bathans(Borders)</name>
      <cmt>http://tinyurl.com/7ksxo58</cmt>
      <desc>http://tinyurl.com/7ksxo58</desc>
      <sym>Dot</sym>
</wpt>
```

...and added in the additional Category and Colour elements that Osmand will interpret:

```
<wpt lat="55.849981" lon="-2.380408">
      <name>Abbey St Bathans(Borders)
      [Car Park Rural]</name>
      <cmt>http://tinyurl.com/7ksxo58</cmt>
      <desc>http://tinyurl.com/7ksxo58</desc>
      <sym>Dot</sym>
      <category>Wildcamping – Car Park Rural</category>
      <extensions>
            <color>#1CD71C</color>
      </extensions>
</wpt>
```

Osmand ignores the `<cmt>` and `<sym>` elements, so they can stay.

I stripped the CR, CU, LU etc codes off the front of the name, as they are now superfluous, but used them to define the `<category>` element.

I added "Wildcamping - " to the start of the `<category>` element. This is to differentiate Wildcamping POIs from other POI sets I have imported (Aires from campingcar-infos, for example).

I appended a CR/LF and the Category to the `<name>` element so that it is displayed nicely when you Long Press the POI.

Colours have been chosen at random. Osmand has Eight built-in colours available when you manually choose a colour for a Category from within the app but, in practise, it will use any normal hexadecimal colour code from #000000 to #FFFFFF

Thanks and regards

Richard R. Goodwin
richard.goodwin@morphology.co.uk
Forum username: Morphology

25-Jul-2015