Locus maps tool for tramper's navigation

Ray Hoare, ray.hoare.nz@gmail.com. September 2019

Basics

Many people these days have a smartphone with a built in gps chip and a large, high-resolution screen. With an appropriate app, and a map that is stored in the phone for off-line use, the phone can be used as a tool for navigation in the bush, instead of using a special purpose GPS device.

On Android, there are many free or cheap apps for this purpose, and maps for New Zealand are supplied at no charge by LINZ. There are also similar apps for iPhones, but I have no experience of them so you will have to check out the iTunes store if you are not on Android.

If you have an app and the appropriate map on your sufficiently-charged phone there is no reason for you ever to get lost, or to waste time searching for a track. The specific app does not matter much, so I strongly recommend people get something, and use it where it matters. If you wish you can record your whole journey, and extract statistics such as distance travelled, but in my view that is not the most important use of the technology.

Locus maps

Locus maps is an Android app on the Google play store. It has a free and a Paid (Pro) version costing \$US 18.

The writer's blurb gives a set of features, the most useful ones of which I have copied here:

- advanced navigation capability, supporting online and offline routing services
- unprecedented choice of premium online and offline maps
- advanced map tools map overlays, offsets, WMS sources support
- tools for monitoring sports activities track recording, customizable dashboard, audio coach,

charts, statistics, support of external BL/ANT+ sensors (GPS, HRM, cadence...)

• worldwide weather 24/7 forecast

• sophisticated tools for **geocaching** - location tools, online/offline logging, support of trackables, Pocket Queries, spoilers...

One feature that is very useful for trampers is a distance measuring tool. When you locate your present position on a map, that position is at the centre of the screen. If you drag the map to show other areas, the distance to the new point at the centre is shown. Use this, for example, to find the straight-line distance to the next hut.

Getting started

The app can be downloaded from the Google Play Store. Search for Locus, and maybe start with the free one and if you use it lots, upgrade later.

Homepage:	http://www.locusmap.eu
Help desk:	http://help.locusmap.eu
Manual:	http://docs.locusmap.eu/

Maps

Mapping programs can usually download maps from the web – this is done in Locus Maps when you choose the Online tab in the Maps option. You will see a list of countries, among them New Zealand, and if you click on that you will see the NZ Topomaps option. While you are on line the appropriate maps are downloaded to fill your screen at the scale you choose.

You are much more likely to want the offline maps that you have downloaded into the phone before you go tramping.

You can use the Locus Maps store to download (at a price) what are called LoMaps, for most of the world, including New Zealand. However, I do not recommend these for tramping.



To get maps for NZ go to <u>https://sites.google.com/site/irnzmaps/</u>. Note that the Kiwi who has produced these files has deliberately chosen not to include the 1km grid information, since Locus has a good distance measurement tool. You can download two versions, but they are both files of the order of 2 Gigabytes in size, so you would normally want to download them first to a computer over a land line, and then transfer them to your phone with a cable. Do read the instructions carefully before downloading the files.

The formats are .mbtiles, which are readable in the Locus Map app.

The copying instructions in the IRNZ page are needlessly technical. I downloaded the map file (NZ_Topographic.mbtiles) to my computer. I plugged my phone into my computer using the ordinary charging cable to the computer's USB port. Ensuring that the phone was on and not locked, I used Windows File Explorer on the PC to navigate to "This PC/SamsungGalaxy7Edge/Phone/Locus/Maps". I then dragged the map file in the usual way from the computer folder to the phone folder. The phone name, and perhaps the first folder down, will be different on your phone.

You need to tell Locus Maps where you have put this file on your phone. You do this by, in Locus, touching the 3-line icon at the top left of the Locus screen, and touching the Maps icon. Touch the Offline tab heading, touch Maps, and then the name of the map file. You won't need to do this again unless you are out of New Zealand and want to use another map.

Other good App choices

I have used Back Country Navigator. One feature of this is that you can download maps of just that part of NZ that you want to use. This is useful if you have limited storage space on your phone, but it also means you have to remember to check that you have the right bit of map installed before you get out of cellphone range.

I have used Orux Map, and it has lot of similarities to Locus maps and some additional features. It has paid and advertising supported versions. It can share map files with Locus.

I have not used NZTopo maps, but the maps look nice. You have to buy the paid version (USD12) to use maps off line. A version for iPhone is available.

Maptoaster is available for Windows and iPhone