## Community Mapping

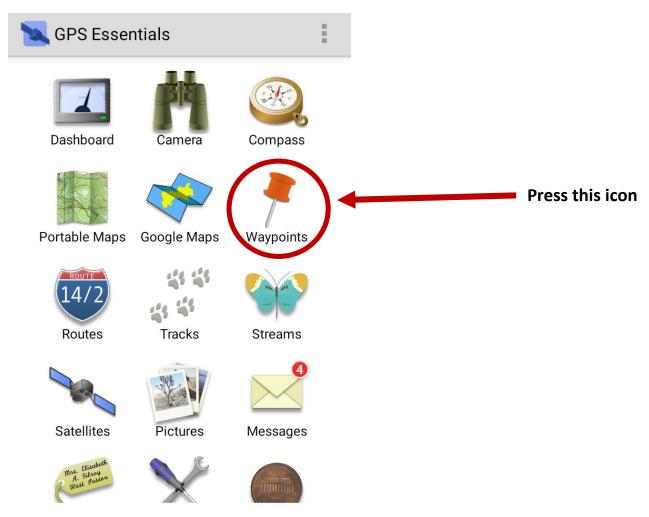
It is possible to use a smartphone to record GPS coordinates whilst in the field. We have therefore installed an app on the phones we have given you that will allow you to record the coordinates of the communities you work in and send these coordinates to the project team via email.

Over the next few weeks whilst you're undertaking your work we would be very grateful if you could use the smartphone to record coordinates. We only need one record per community, as close to the centre of the community as possible. As we do not want this activity to have a big impact on your time, we do not need you to spend a long time finding the centre – just be practical and please avoid community edges if possible.

To record locations, open up the GPS Essentials app on your phone.



The app will open on the following screen. You will be using the Waypoints option

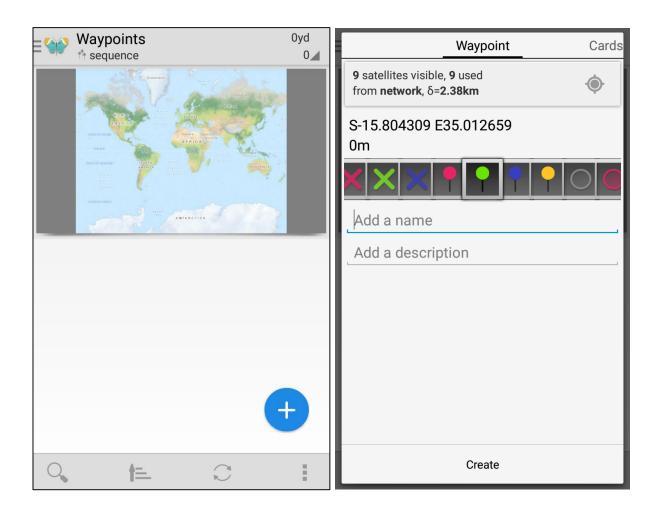


The first time you use this you will see the screen below (left). This shows that you currently have no coordinates recorded. Once you have recorded coordinates, these will be listed and mapped on this page.

Click on the



to add a point onto the map. The Waypoint screen will appear (below, right).

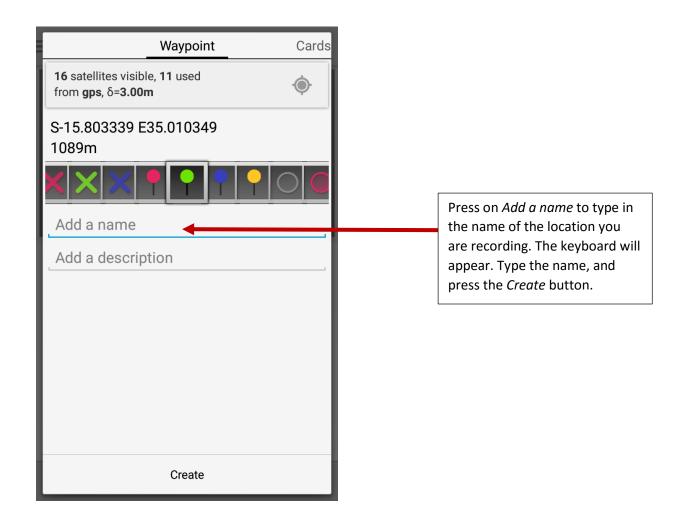


The accuracy of the GPS coordinates you record is dependent on how good your GPS signal is. On the Waypoint screen above, the accuracy is initially very poor

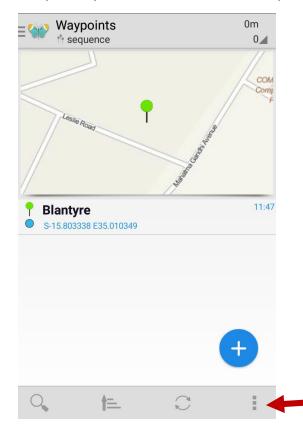


To improve the accuracy you might need to wait a few minutes. Make sure you are outside, in a clearing as you want to be able to connect to as many satellites as possible. Ideally you want the accuracy to be **15 metres** or less.

Below is a picture taken of the Waypoint a few minutes later. The number of satellites used has increased to 11, and the accuracy has now improved to 3 metres.

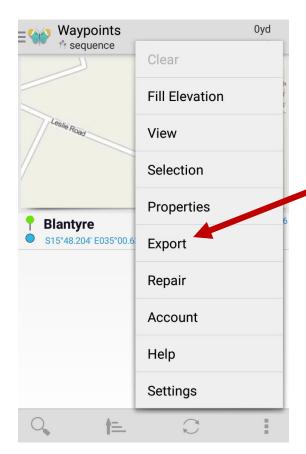


Once you have added the name of the location and pressed create, your point will appear on the map. Note that you **do not need internet connection to record GPS coordinates** on your phone, but you may not be able to view the map clearly if you do not have internet connection.



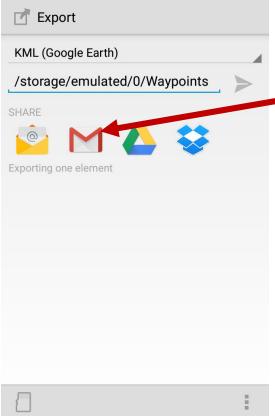
Continue to add additional locations to the map using the steps above. These points will be stored on your phone. To share them with the study team you will need to make sure you have an internet connection, and you can then send them to us by email using the app.

To send the points by email, press the three dots in the bottom right corner of the screen.

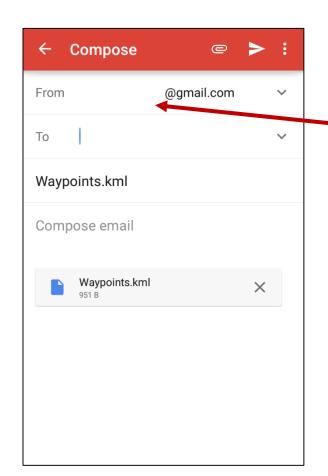


This will bring up a list of options.

To send the points you have collected so far to the study team, press *Export* 



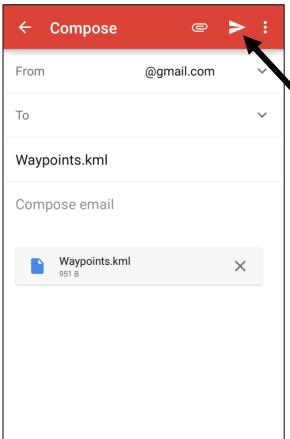
Press the red envelope (the gmail icon)



A Gmail screen will then open.

Your gmail address will be written here.

You will need to press on the *To* section and use the keyboard on the smartphone to type in the receiver's email address



You can add a message to the email if you wish by pressing on *Compose email* and using the phone's keyboard to type your message.

When you are ready, press the 'send' arrow in the top-right corner of the screen.

You will need an internet connection to send the coordinates. If you are not successful, wait until you at a location where there is a signal and try again.

Once the message has been sent you will return to the *Export* screen. Press the backwards arrow at the bottom of your phone to return to the *Waypoint* screen and continue to collect coordinates.