



TOOLBOX

## Obtaining GPS Coordinates

### OBJECTIVE

To obtain and record the GPS coordinates of where you found your phage

### BACKGROUND

Relating the types of locations that yield phages can only be evaluated if we know where the phages came from. Recording this data is necessary for that evaluation.

### HELPFUL TIPS

GPS coordinates for the places that phages were found is recorded on phagesDB. But it may someday be helpful to record where they weren't found.

## How to Obtain GPS Coordinates for the location of your Phage

You will need to provide GPS coordinates of the site that you found your phage. It might be helpful to record the coordinates in your notebook for each sample that you obtain.

Please provide GPS coordinate where the phage was found using the N/W Decimal Degree format (# N, # W).

1. There are certain smartphone apps that would provide GPS coordinates. For instance, iPhone users can use the built-in "Compass" app, while Android users can download apps such as "MyLocation" or "GPS Status."
2. An alternative method for obtaining GPS coordinates would be through a web mapping service application. One such service can be found via this link: <http://www.heywhatsthat.com/profiler.html> (OR <http://bit.ly/yqKB> for a shorter URL) Simply drag the map to the location where the environmental sample was found, zoom in as much as possible, and click on the map to obtain the GPS coordinates of that location. The output should be to the right of the map and be in the N/W Decimal Degree format.
3. You can also use [Google maps](#). Use the satellite view to find the location of interest. Once the location is in view, right click on the spot of your sample, and choose "What's here?" The GPS coordinates will appear in the Google box at the top of the page.

4. Convert the GPS coordinates to the correct format if necessary. One convenient converter is provided by the FCC of the United States, and can be found here:  
<http://fcc.gov/mb/audio/bickel/DDMMSS-decimal.html> (OR <http://bit.ly/IV9SAv>)
5. Enter the degrees, minutes, and seconds (DMS) and hit "Convert to Decimal." For example, the coordinates  $40^{\circ} 26' 46'' N, 79^{\circ} 57' 11'' W$  from the iPhone's "Compass" app will be converted into  $40.446111 N, 79.953056 W$ .