Creating your Wheel of Life



Wilderlab's Wheel of Life diagrams are a way to easily visualise the biodiversity detected in your eDNA samples according to their taxonomic grouping. We've created an online application where you can create your own Wheel of life to assist with communicating your results.

1 Upload and select samples - Your Wheel of Life can be generated in two ways:

Upload your job results Excel file (xlsx)

- In the Shiny Wheel application, click 'Browse...' to find and upload the file(s) from your computer. Multiple files can be uploaded to generate a Wheel of Life with the results from more than one job.
- 2. After the files have uploaded, select the UID numbers of the samples you would like to include in your Wheel of Life in the box provided.
- 3. Click 'Generate Wheel' to automatically create your base Wheel.

Upload your online sample report (csv)

- After locating your online sample report via the Explore map, click 'Sequence Information', and select 'Download as CSV'.
- 2. In the Shiny Wheel application, click 'Browse...' to find and upload the file(s) from your computer. Multiple files can be uploaded to generate a Wheel of Life with the results from more than one sample, from more than one job.
- 3. After the files have uploaded, click 'Generate Wheel' to create your base Wheel.
- **2** Customising your Wheel After generating your base Wheel, more options will appear that can be used to change how the Wheel looks:

Show coloured segments: If changed to 'No' only the "bones" of the Wheel will be shown without the coloured taxonomic breakdown.

Include group names: Selecting 'No' will remove the outer dark blue circle and taxa group names.

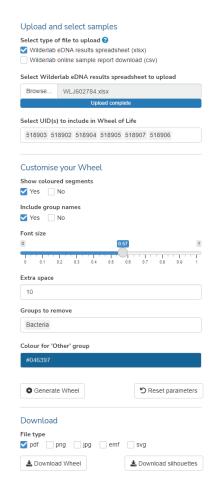
Font size: Change the size of the font used for the taxa listed.

Extra space: Create more or less space between the names of the taxa and the outer dark blue group-name circle. This helps to create more or less space for your silhouettes.

Groups to remove: If you don't wish to show all taxa groups on your Wheel, you can select groups to remove via the drop down. Eg. select 'Bacteria' to generate the Wheel without any bacteria.

Colour for 'Other' group: If there is a segment for unclassified taxa (assigned 'Other'), select a colour for this segment using the drop down or a hexcode.

After altering any parameters, click 'Generate Wheel' to see a preview of your new Wheel. Click 'Reset parameters' to return the Wheel back to its original form.

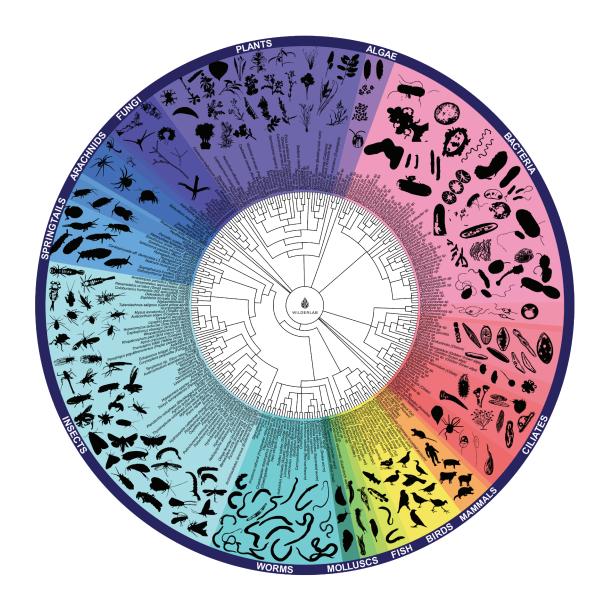


3 Finalising your Wheel

- 1. Select the file type you would like to save your Wheel as.
- 2. Click 'Download Wheel' and the Wheel will be downloaded as it is shown in the preview.
- 3. Click 'Download silhouettes' to create a zip folder with the SVG silhouettes of the taxa shown on the Wheel.
- 4. Silhouettes can be added to your Wheel in several third-party applications such as Microsoft PowerPoint and Adobe Illustrator.

Note: This draws on a living library of silhouettes created at Wilderlab, thus may not include a silhouette for all of the taxa presented on your Wheel.

Example of a finished Wheel of Life:



This is a new application in its Beta testing phase, meaning it may undergo small changes. If you have any questions or feedback on this new tool, don't hesitate to reach out to the Wilderlab team at info@wilderlab.co.nz.