

Working steps – Plot relocation and Field survey

- If coordinates of original plots are not available, relocate them with the best accuracy as possible, taking advantage of indication of environmental variables (elevation, aspect, inclination).
- Resurvey each relocated plot in the selected point, and two additional replicates at a distance of at least 20 m. Each plot shall be of the same sample area as the original one.
- If you are able to exactly relocate the original plot (because you are the author of the first plots / you are in touch with previous recorders / you could access detailed maps with precise indication of survey sites), you can resurvey it with just one plot. In other cases, three replicates are needed.
- Give priority to plots for which you have indication of the area surveyed in the first sample.
- Once you have an idea of the amount of work needed to resurvey the plots, select a reasonable number of them that you can manage to resurvey, considering time and resources.
- For each plot, record all the vascular plant species rooting inside it and those rooting outside, but with any above ground part falling inside the plot (shoot presence). Recording of cryptogam species is not required by the project, but you are free to record them, if you wish.
- Record the coordinates of the plot in its centre, along with the associated precision measure (in m). Specify if the coordinates refer to any other element of the plot (e.g., a corner).

Explanation of the fields in the recording sheet

Header

- **Plot code:** Give a code to each plot, e.g. by pasting 3 letters from the island name and a progressive number (01, 02...). Also include a reference to the replicate (a, b, or c) at the end. As an example, if I am recording plots on Lampione island, I would name my plots LMP01a, LMP01b, LMP01c, LMP02a...
- **Original plot code:** Give a code to each old plot you resurvey, in order to make a connection between old and new ones.
- **Relocation accuracy:** This field is not present in the field recording sheet, but just in the Header section of the “data_format_resurvey” file. Indicate the potential error in plot relocation (in m).
- **Bibliographic reference original plots:** This field is not present in the field recording sheet, but just in the Header section of the “data_format_resurvey” file. Indicate the citation of the paper/source of original plots.
- **Island name and location:** Name of the island and indications of the site location, e.g., “Lampione – southern slope”
- **Replicate:** indicate the replicate code (a, b or c). If you sample just one plot per each old plot given the high accuracy in plot relocation, just indicate “a”.
- **Recorded by:** name of the author(s) of the survey.
- **Cover scale:** Cover scale used to indicate species cover on each plot. Possibly, use a percentage scale, as it gives a more precise idea of the relative abundance of each species. Alternatively, you can use classical scales, such as Braun-Blanquet.
- **Date:** date of the resurvey, reported in the dd.mm.yyyy format (day.month.year).
- **Elevation:** elevation of the recording site (in meters above sea level).
- **Aspect:** aspect of the recording site (preferably in degrees)
- **Inclination:** slope of the recording site (in degrees)

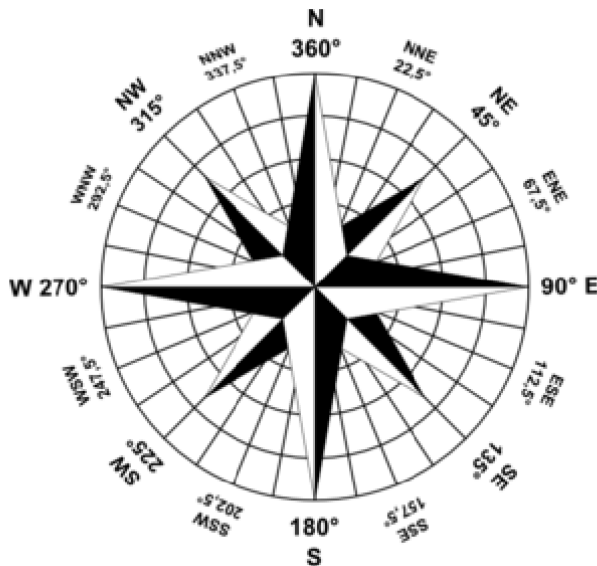
- **Latitude:** latitude of the recording site (in decimal degrees, WGS 84 system), e.g., 35.550836.
- **Longitude:** longitude of the recording site (in decimal degrees, WGS 84 system), e.g., 12.318964.
- **Precision:** precision measure associated to the plot location (in meters).
- **Sampled area:** area of the plot (in m²)
- **Disturbance evidence last 12 months:** provide information on the disturbances (grazing, fire, gull colonies) occurred in the site in the last year (if there is evidence). 0 = not occurred, 1 = occurred, NA = not known.
- **Notes:** you can provide additional information, e.g. on the species of grazers present in the island (if any), or any other relevant information (other disturbances...).
- **Layers and cover:** for each layer indicate the percentage cover in the plot and the max height in cm. **NB: Shrub and tree layers are recorded only when shrub or tree species are present in those layers.**
- **Litter, Dead wood, Stone, Gravel, Fine soil:** estimate the cover percentage of each category inside the plot.

Species table

- For each species occurring inside the plot, indicate the layer of occurrence and its cover in accordance with the chosen scale.

Once you collected data, fill in the excel file “data_format_resurvey”. For the species list, the long format is preferred. You can see a hypothetical example of both long and wide formatting. **Be careful of the separation of layers, in case you have more than one!**

For the conversion of cardinal points in degrees:



This protocol was developed within the BIOME Lab (University of Bologna). For any question, you can contact Francesco Santi: francesco.santi12@unibo.it - <https://site.unibo.it/resmile/en>