TurbovegSD v1.3

Quick start for Turboveg on Android devices

- Install TurbovegSD from the Google Play store (not yet available) or install the app manually on the device using the apk file (setup file for Android).
 See http://www.wikihow.tech/Install-APK-Files-on-Android how to install.
- 2. Launch TurbovegSD (the app automatically creates a folder structure for export and import of xml project files).
- 3. Launch the PC version of Turboveg (**2.134a** or higher), open the database that reflects the work you wish to perform in the field, and create an export to 'XML project file for TurbovegSD', containing zero or a number of selected relevés.
- 4. Copy the xml file from the PC to the smart device into the folder \Documents\TurbovegSD\Import.
- 5. Select *Import* in the main menu of TurbovegSD, select an xml file and optionally give the database a (unique) name. Note that multiple databases can be managed by TurbovegSD.
- 6. Finally select the option *Input* in the main menu to start the data entry.
- After having finished the data entry select *Export* in the main menu. There are several options to transfer an export file (xml) to the PC (e.g. by mail or Google Drive) for import into the Turboveg database (in Turboveg select *Import -> TurbovegSD XML file*).

Main menu TurbovegSD

- Input: add or edit relevés.
- *Import*: import an xml project file exported from Turboveg on the PC.
- *Export*: export the current database to an xml file for import in Turboveg on the PC. The xml file is stored in the smart device folder '<Documents>\TurbovegSD\Export' and should be copied on to the PC to import the data in a Turboveg PC database.
- Settings: here you can select another Database or change the visibility and order of the Header and Species data. You can also select a map (kml file, not bigger than 1Mb; polygons only) that can be put on top of the OpenStreetMap. For the selected map an attribute can be selected that will be shown inside the polygons, but only at high zoom level. The kml files should be placed in the TurbovegSD/Maps folder on the device.
- About: about the application.
- *Exit*: close the application and release it from memory.

Input

In the input window there are three tab sheets, MAP, RELEVES, and VEG. TABLE.

- MAP: for navigation. Currently only works with OpenStreetMap. Offline access is
 possible as far as map tiles already have been cached during previous visits. Cached
 map tiles are stored in the folder /osmdroid/tiles/ on the smart device.
 In order to save battery life the GPS automatically switches off when not needed.
- *RELEVES*: for editing relevés.
- VEG.TABLE: to display a table of selected relevés in tab sheet RELEVES.

RELEVES

In this form you can add, edit and delete (one of multiple) relevés. Use the clear button to remove a selection.

Add (or Edit)

Here you can add or edit relevés^{*}. The first step is to enter the header data on the first tab (items in red colour like cover scale are mandatory), followed by entering the species data on the second tab. There select *Add* to add new species, or in case you have already entered species just click one of the grey cells to change an attribute. In the *Add* species form you can enter any combination of the first few characters of the genus and optionally the first few characters of the species. Finally you may select the vegetation layer and/or cover abundance at the bottom of the screen. Click the *Add* button to store the species data. Once you have finished entering species touch the return button to go back to the species overview. Now you can complete or modify the list by clicking the attribute cells you wish to change.

*If you select an existing relevé in the list you will get the option to copy the header data of that relevé to the new one.

X,Y,Z coordinates

With GPS on TurbovegSD can automatically grab all the three coordinates. The latter, the Z coordinate (elevation/altitude) will only be stored if the field 'Altitude' is present in the database. This is by default the case for databases the have been created with the international version of Turboveg, not the Dutch version. Note however that the altitude measurement is not very accurate. Therefore this feature is not likely to be applicable for the relatively flat Dutch landscape.

Good practice

Create an export of the database at the end of **every** working day and import the XML file in a Turboveg database on your PC and check if all data is in place.

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