

Forest Data Bank Mobile application

User's manual

Version 1.17



Sępocin Stary, 2023

MAIN WINDOW OF THE mBDL APP



Menu Window displaying base maps, thematic maps (including information about bans) and WMS maps

Switching between online mode/offline mode

Search:

- forest address
- cadastral parcel
- address
- point with coordinates

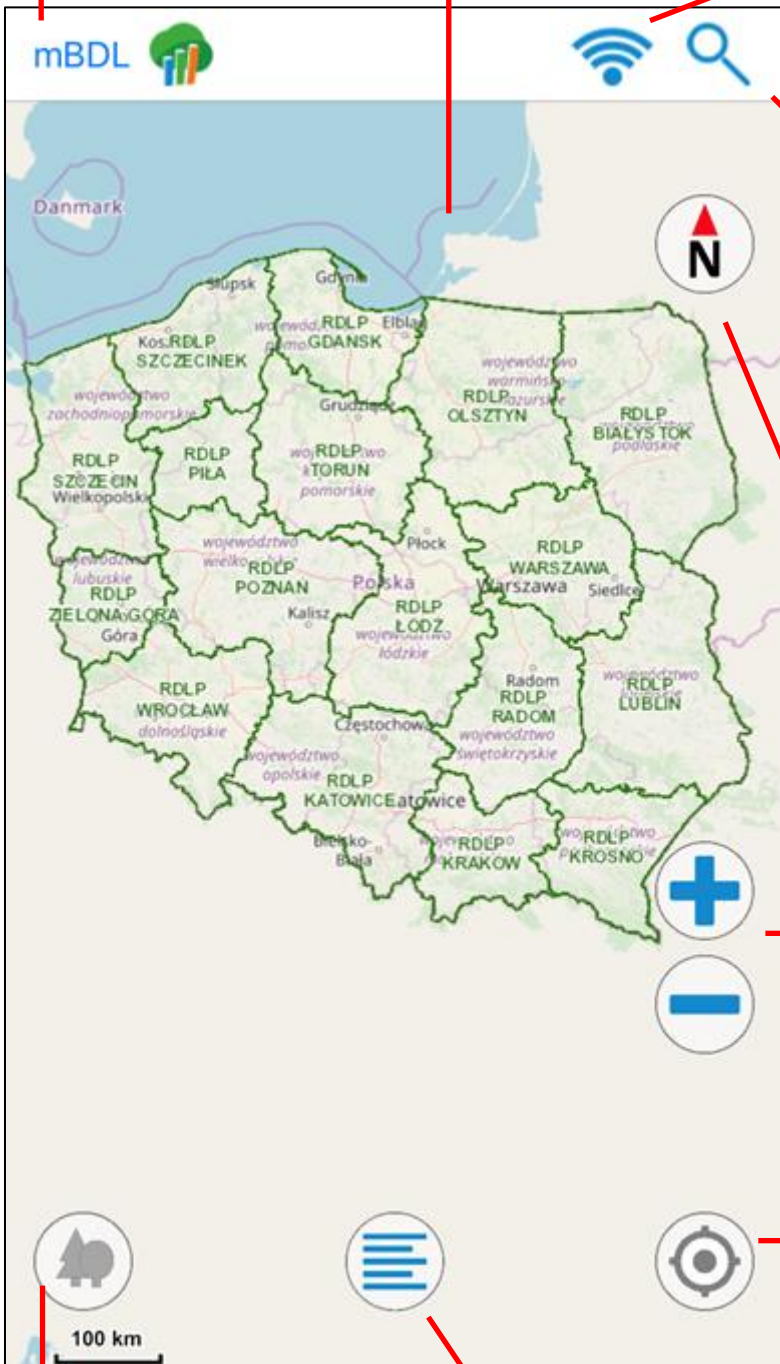
Orient the map to the north

Zoom in and out

Show my location / route tracking

Show available tools

Opens a window with a list of symbols and markings on the map





BDL maps

Display the selected BDL thematic map and its legend.



Basemaps

Show the selected basemap/turn off the basemap.



WMS maps

[Connecting external OGC services stored in the application and adding the address of any WMS service.](#)



Register track

[Route recording](#) based on the device's current location.



Save my location

[Save a point](#) using the device's current location.



Share my location

[Sharing current location.](#)



Points and tracks

[Manage points and tracks saved by the user.](#)



Offline data

[Manage the map data downloaded for offline work.](#)



Shp, kml, gpx files

[Add and display a file in the Esri Shapefile \(shp\) format, kml/gpx.](#)



Switch to offline mode

Switch the application into the [offline work mode](#) (without an Internet connection).



Help

Information about the Forest Data Bank mobile app, contact and assistance.



Available tools - mode of operation



To obtain information about the forest compartment or other information presented on the map, activate the button in the lower-left corner of the application.



If no tool is currently active, all icons will be grey. If any of the tools is active, its icon will be colored.

Turning on a tool other than the one currently selected will disable the previous one. If we want to disable all tools, select the last button from the list. A brief description of the individual tools is provided below.



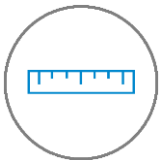
Available tools - list



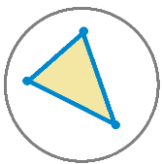
Displaying stand inventory data on which the indicated point is located



Displaying additional information about the indicated point, both regarding the administrative or forest division as well as the BDL thematic data or data from the WMS, if they exist for this point



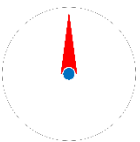
Measure the distance between the points indicated on the map



Measure the area between the points indicated on the map



Displaying the coordinates of the selected point, saving points.



Tool for navigating to a selected point



Finish the work of the currently selected tool



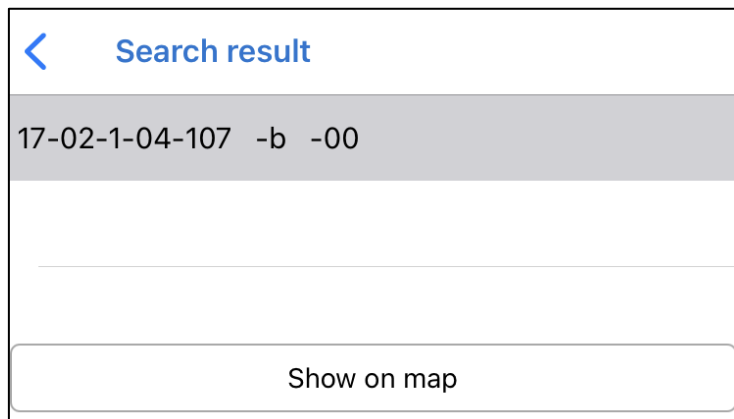
SEARCH FOR OBJECT ON THE MAP



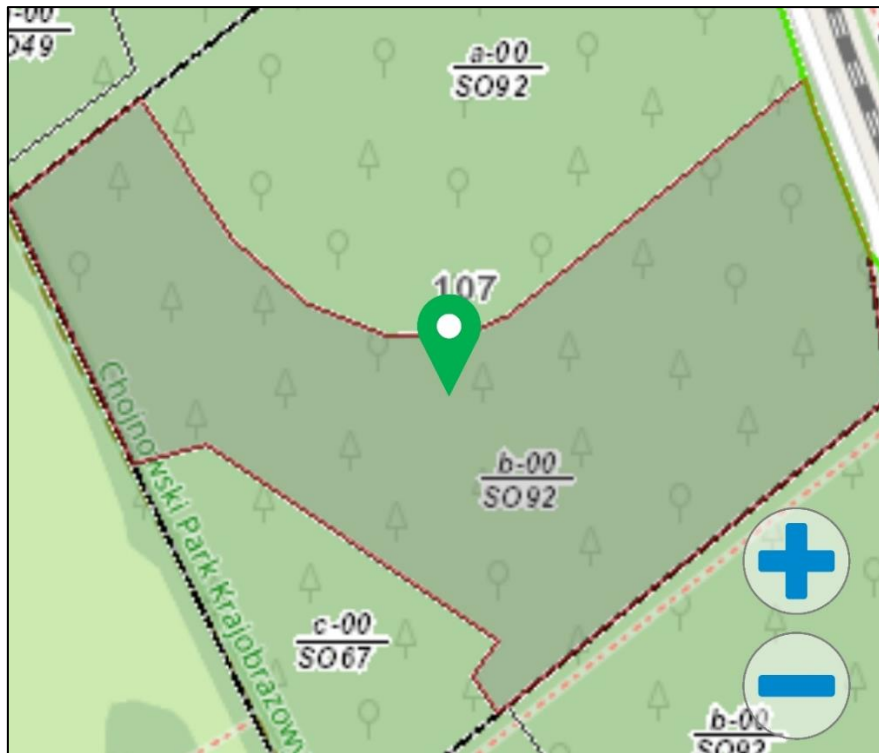
To search for an object with a specific ID, press the *Search button* and choose one of 4 tabs, depending on what kind of object you want to search for. Currently, it is possible to search for:

- [Forest addresses](#)
- [Cadastral parcels](#)
- [Address – adress points](#)
- [Point with the coordinates](#)

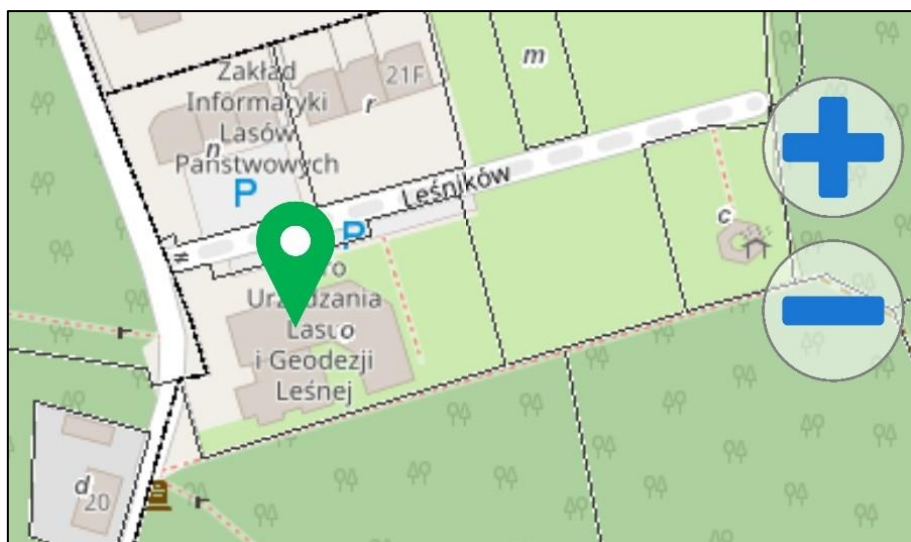
When the application finds object/objects, it displays their addresses and provides an option to display the selected object on the map.



After pressing the *Show on map* button, the app returns to the map window and the selected object is displayed. If the user searched by forest address or by parcel, the selected object will be additionally marked with a separate color. To deselect them, click on the map and select the *Clear selection* option.



In the case of searching by address or coordinates, the application will return to the map window and select a point corresponding to the search parameters. In the first case, the marking will be green, in the second - blue.

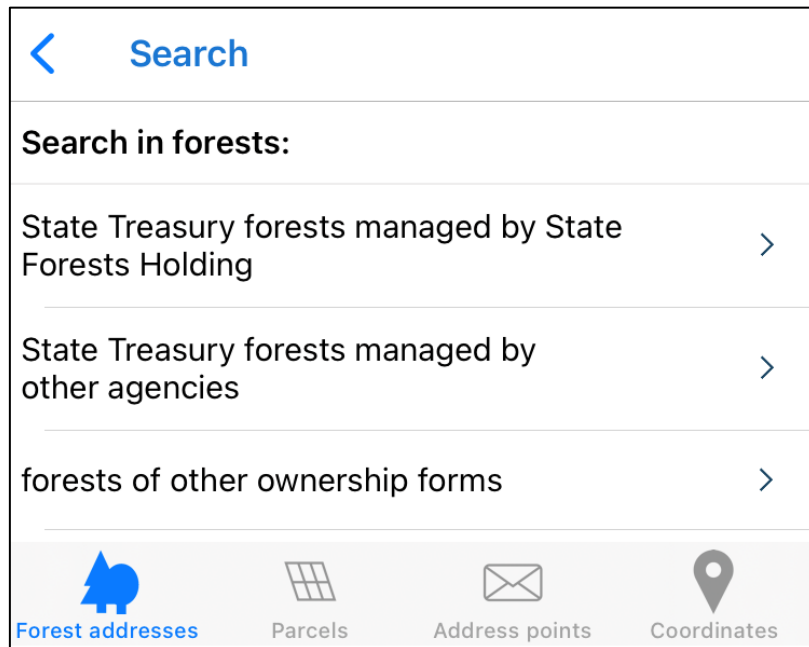




SEARCH ADDRESS FOREST



To search for an object using a forest address, on the first tab of the *Search* tool, select the type of ownership.



Then select individual address fields from the lists. Depending on your selection on the first screen, the list of address fields will be slightly different. For example, below is a screen with a list of address fields for an address under the *other forms of ownership*.

The image shows a mobile application interface for entering a forest address. The title is 'Forest address' with a back arrow on the left. The form consists of several rows, each with a label, a value, and a right-pointing chevron. The values are: Province (D), County (04), Municipality (032), Cadastral unit (0009), Ownership (10), Compartment (01), and Subcompartment (empty).

Field	Value
Province	D
County	04
Municipality	032
Cadastral unit	0009
Ownership	10
Compartment	01
Subcompartment	

Some of the fields may be filled in automatically for some addresses. In the above example, the ownership form and the compartment have been automatically filled in because there is only one ownership form for the selected area and only one compartment for it.

The searched address (or its fragment) appears at the bottom while completing individual fields, and after filling in all the necessary fields, the *Search* button will become active, which will allow you [to go to the search results](#) and [to display the selected section on the map.](#)

< Forest address		
RDSF	17	>
Forest inspectorate	02	>
Forest district	1	>
Forest range	04	>
Compartment	107	>
Subcompartment	b	>
17-02-1-04-107 -b		
<input type="button" value="Search"/>		

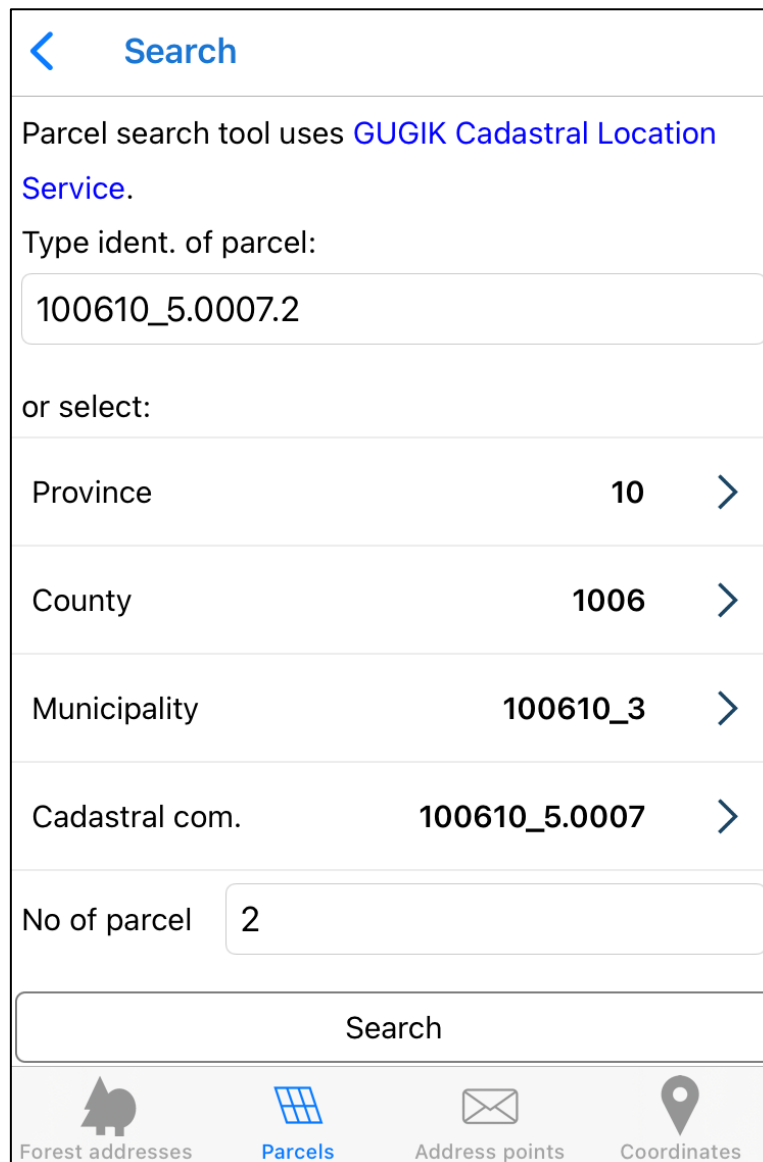
When searching for areas for the State Forests, it is possible to search for an area from the forest district level to the subcompartment level, in other cases only for the compartment and subcompartment level.



SEARCH CADASTRAL PARCEL



To search for an object using a registration plot, on the second tab of the *Search* tool, enter a previously known plot identifier or select a province, county, municipality and cadastral compartment from the list and enter a known plot number.



The screenshot shows a mobile application interface for searching cadastral parcels. At the top, there is a back arrow and the title "Search". Below this, a text label states: "Parcel search tool uses [GUGIK Cadastral Location Service](#)." The main input section is titled "Type ident. of parcel:" and contains a text box with the value "100610_5.0007.2". Below this, the text "or select:" is followed by a list of selection options, each with a right-pointing chevron:

Province	10	>
County	1006	>
Municipality	100610_3	>
Cadastral com.	100610_5.0007	>

Below the list is a text box labeled "No of parcel" with the value "2". At the bottom of the form is a large "Search" button. The bottom navigation bar contains four icons with labels: "Forest addresses" (tree icon), "Parcels" (grid icon, highlighted in blue), "Address points" (envelope icon), and "Coordinates" (location pin icon).

After filling in the necessary fields, the *Search* button will become active, which will allow you to go [to the search results](#) and [to display the selected plot on the map](#).



SEARCH ADDRESS



To search for an object using an address point, on the third tab of the *Search* tool, enter the address fields.

The address point search tool uses the GUGiK Universal Geocoding Service and allows several searching variants. Into the search field, you can write: city name, city and street name, city and number, or city, street and number.

After filling in the field, the *Search* button will become active, which will allow you to go [to the search results](#) and [to display the selected address on the map](#).



SEARCH COORDINATE



To search for a point using coordinates, go to the *Coordinates* tab. Next, the application will display a window with a selection list of the coordinate system (WGS 84 in two variants or PUWG 1992).

After entering the geographic coordinates the *Search* button will become active, will allow you to go [to display the selected address on the map.](#)



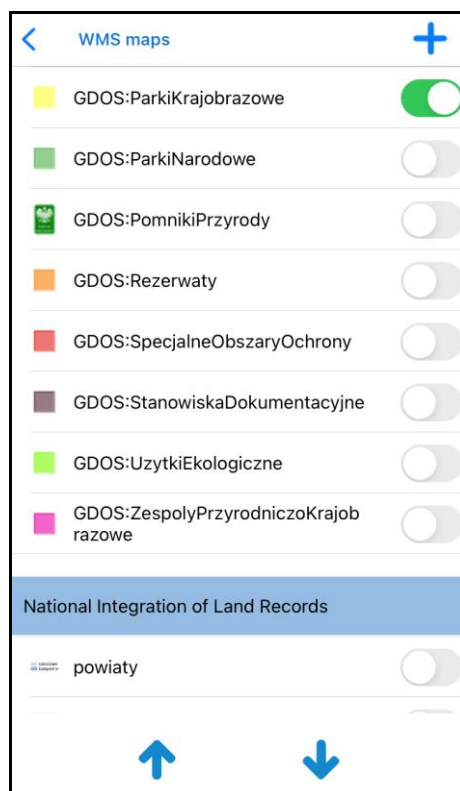
WMS MAPS MENU




The WMS Maps menu allows you to connect external OGC services. In the current version of the application, the following are permanently saved:

- GDOŚ service (Protected areas)
- National Integration of Land Records
- Orthophotomap - Geoportal.gov.pl
- Numerical Terrain Model – Shading



Specific information can be displayed on the map by turning it on in the list. Additionally, by selecting the selected service, you can move it up or down, which will also affect the order of the selected information on the map.





Additionally, the user may, by using the button  in the upper right corner of the screen, add another address of the WMS service. It only needs to enter name under which it will be visible on the list and enter or paste in the address of the WMS service.

Name:

Address:





 

If you select such a service on the list later, the  and  buttons will appear, which will allow you to rename the service and remove it from the list.

Numeric Model of Terrain - Shading

Geoportal - administration

Administracyjna




REGISTER TRACK






To start recording the route, enable the Register track option in the menu and then enter the name under which the route will be saved on the device and, optionally, a description of the route:

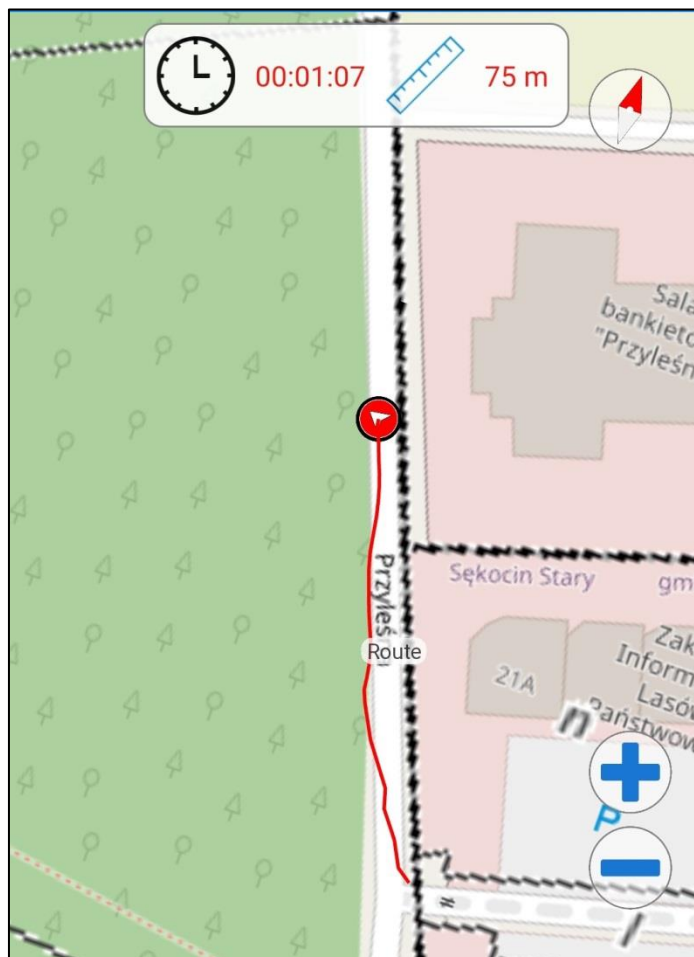
Name:
Walk

Description:
Enter description

Change color 

By entering the name of the route, you can also choose the color of the route. After clicking on the  button, the application will start recording the route, basis of successive readings of the current location. In addition, the screen will display information about the duration of the route recording and the distance traveled.



The route will be recorded until you turn off the *Register track* option in the menu. When you finish recording the route, it will be saved and will be available in the list of [saved points and routes](#).

The application's full permission to Device Location is required for the correct operation of route recording. In case of any problems with this functionality, first of all, make sure that the application's permissions are set to *Allow all the time* as shown in the window below.

ALLOW LOCATION ACCESS

Never

Ask Next Time

While Using the App

Always



App explanation: "Twoja lokalizacja zostanie wyświetlona na mapie oraz wykorzystana do rejestrowania trasy i nawigacji do punktu (również w tle)."

Precise Location



Allows apps to use your specific location. With this setting off, apps can only determine your approximate location.



DISPLAYING STAND INVENTORY DATA



While the *Stand description* tool is active, the user selects a partition on the map, its description will be displayed. Individual parts of the description can be expanded and collapsed, and in addition to address data and general data, the description also includes information on layers, species or cues. If you click on a line with a description of *Species/Layers/Cues*, a new window will appear with an explanation of the abbreviations used in the description.

< Stand description

Address

Address forest: 17-02-1-01-21 -b -00

Form of ownership: Lasy Państwowe

RDSF: WARSZAWA

Inspectorate: CHOJNÓW

Forest district: CHOJNÓW

Forest range: Sękocin

Province: MAZOWIECKIE

County: Pruszkowski

Municipality: Raszyn

Cadastral unit: Sękocin Stary

Compartment and subcompartment: 21b

Status as of year: 2021

General

Layers

Species

< Stand description

Address

General

Layers

Species

Layer: DRZEW Species: SO Share: 10
Age: 118 D13: 40 H: 28 Site index: I
Growing stock: 454

Layer: DRZEW Species: DB Share: MJS
Age: 43

Layer: DRZEW Species: DB Share: PJD
Age: 118

Layer: DRZEW Species: DB Share: PJD
Age: 63

Layer: DRZEW Species: ŚW Share: PJD
Age: 63

Layer: DRZEW Species: BRZ Share: PJD
Age: 63

Layer: PODSZ Species: DB

If you are working offline (*Local data*), inventory data is available only for stands managed by the State Forests Holding which have been downloaded to the mobile device.

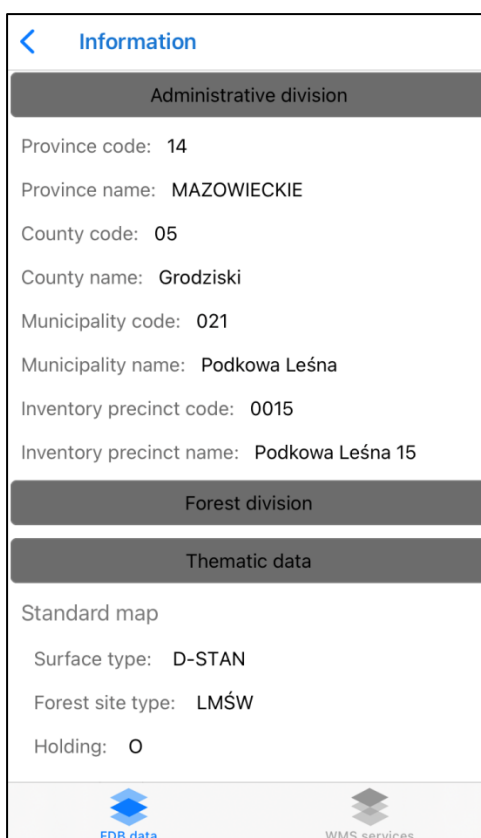


INFORMATION TOOL



To obtain additional information about the place of interest, activate the *Information* tool and then select the point on the map.

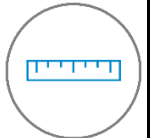
On the *BDL data* tab, you will find information on the administrative and forest division as well as on other thematic data, if they exist for a selected point.




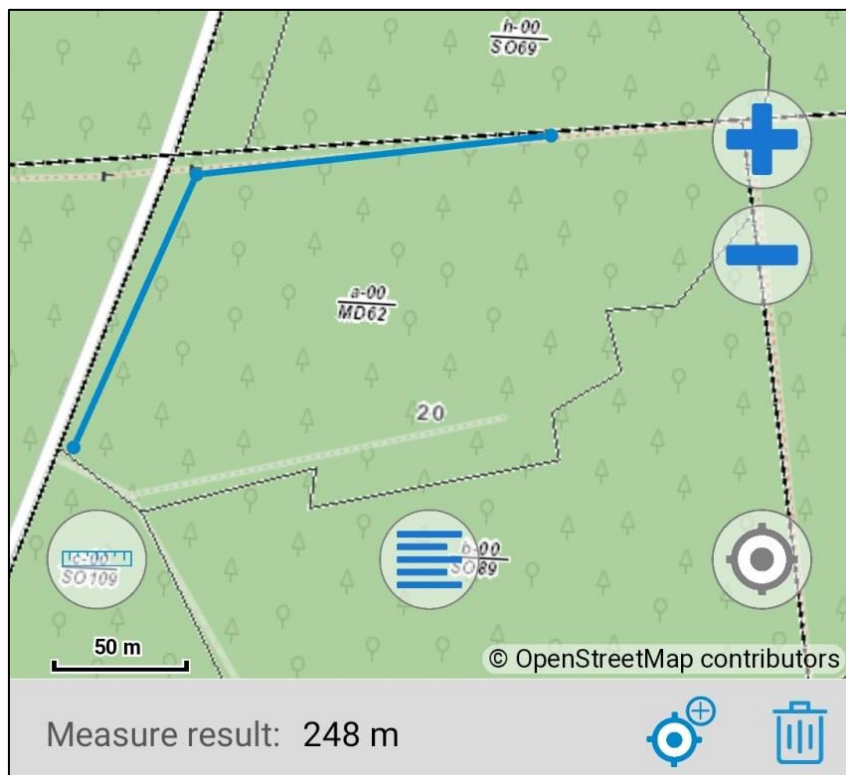
To display a description from an external map service, add a layer from the [WMS Maps](#) menu. Then select the *Information* tool and click on the map where the layer is displayed. A window with the WMS data description and the name of the previously selected service will appear for the indicated object.




DISTANCE MEASUREMENT



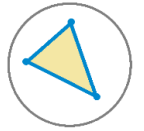
When the *Distance Measurement* tool is activated and the user points to a minimum of two points on the map, consecutively inserted points are connected by a blue line, and the measurement result between the first and the last point is visible at the bottom of the application's main window. Breakpoints can be added by pointing on the map or from the device's current location. To add a point from a location, click on the icon . It is also possible to move connection points, to do this, click on a point and select *Edit Point* options, and then when the point turns red, while holding down, move it to the desired location on the map.





You can delete individual measurement points by selecting them on the map and you can reset the entire measurement using the button  in the lower right corner of the application.

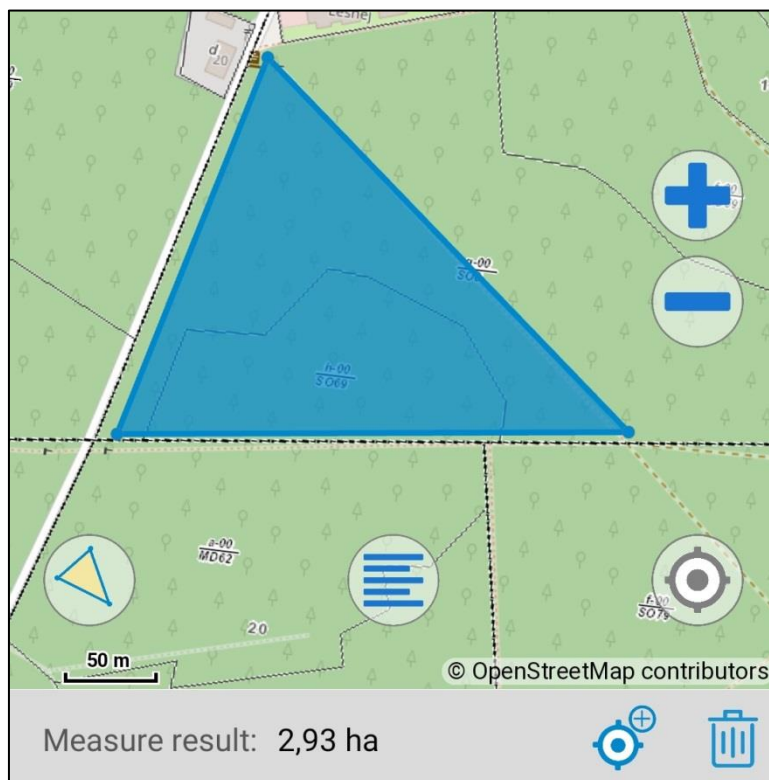


AREA MEASUREMENT



When the *Area Measurement* tool is activated and the user points to a minimum of 3 points, the measurement result is displayed at the bottom of the application's main window. Breakpoints can be added by pointing on the map or from the device's current location. To add a point from a location, click on the icon . It is also possible to move connection points, to do this, click on a point and select *Edit Point* options, then when the point turns red while holding down move it to the desired location on the map.

It is possible to delete individual measuring points by selecting them in the main application window or to reset the entire measurement using the button  in the lower right corner of the application.



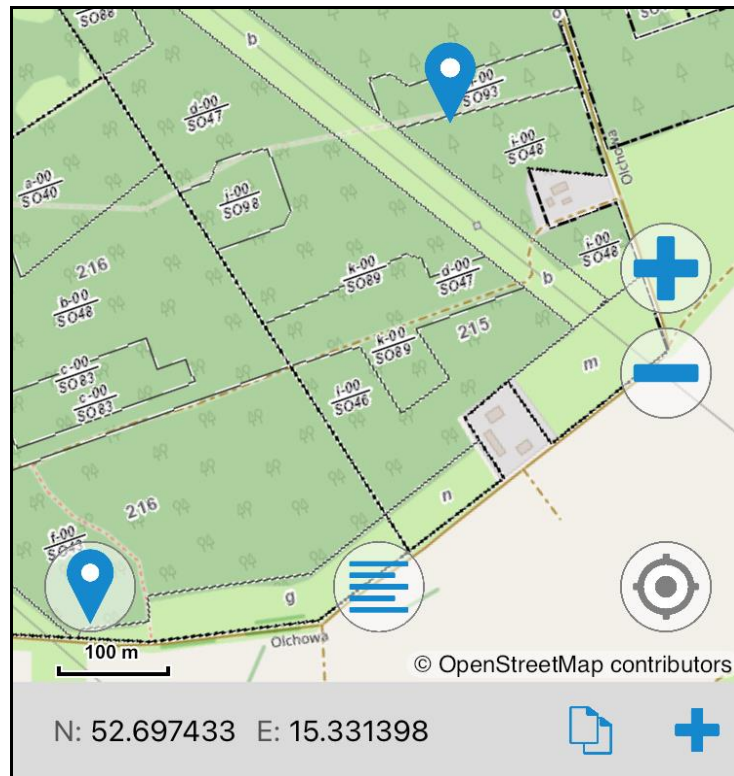
Measurement results up to 9999 m² are in square meters, above 10,000 m² are displayed in hectares.





DISPLAY OF POINT COORDINATES



After activating the *Point Coordinates* tool and indicating a point on the map, its coordinates are displayed at the bottom of the main window.

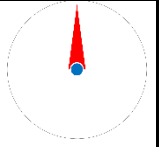


There is also possibility to copy the coordinates to clipboard  or to save a point  (similar to [Save point with my location](#)).

Management of the points saved by the user is possible in the [Points and tracks](#) window in the main menu.



NAVIGATION TO A POINT ON THE MAP




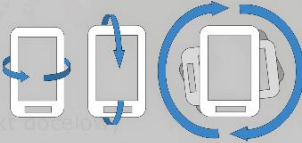
For proper operation of the *Navigation* tool, it is necessary to activate the *Location* function on the user's device! Otherwise, the application will report that there is no access to GPS and the tool will not be activated.

For correct working of the navigation (the arrow pointing in the right direction), the device must be kept parallel to the ground, such as a compass. During navigation, the application forces the screen to be positioned horizontally.

When starting navigation, a message will also appear, what should be done to improve the compass operation:

You can increase the accuracy of the compass on your device

To do this, follow these steps:

1. Circle your phone a pair of 8's in the air.

2. Rotate the phone in 3 directions as shown in the picture below.

3. The magnets in close vicinity will have a negative effect on the functioning of the compass. If you have a flap with a magnetic clasp, we advise you to remove it to improve the accuracy of the compass.
4. If your compass does not work properly, restart your phone and calibrate it.

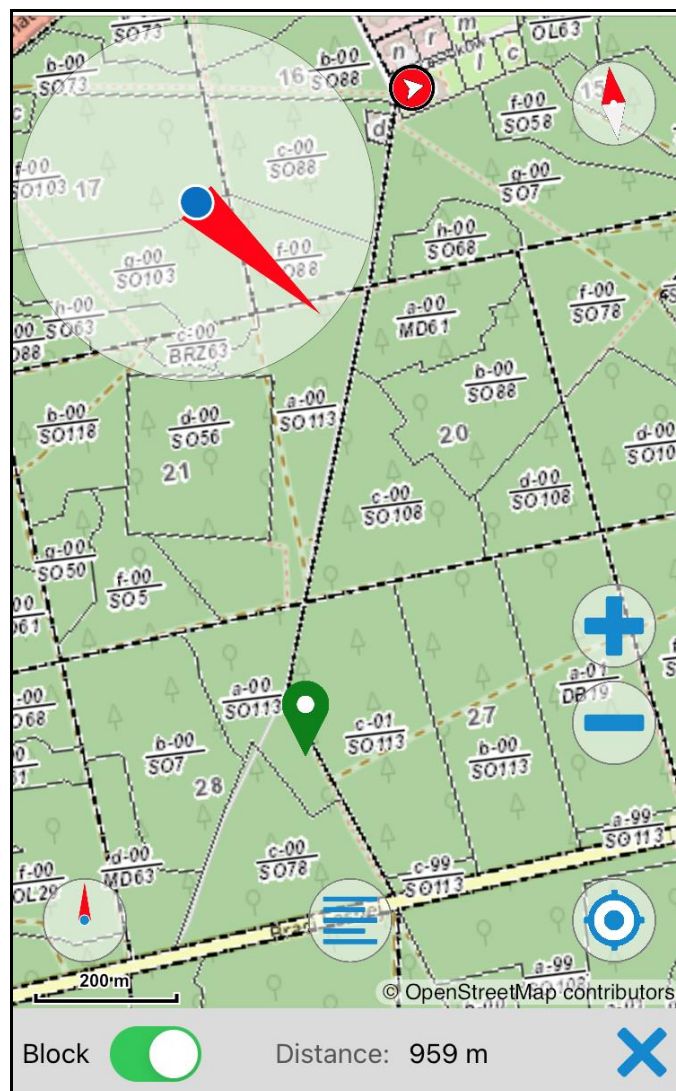
do not show again

You can return to this message in the Help > Messages menu.

If you select an option below the OK button, this message will no longer reappear.

If, after activating the *Navigation* tool, you indicate a point on the main screen, the application will show the direction in which to follow. Additionally, the distance to the selected point is also shown at the bottom of the screen. To prevent accidental shifting of the target point, turn on the lock switch after setting it. Then, until this switch is turned off, subsequent clicks on the map will not cause the target point to be moved.



Navigation can also be started by clicking on a previously inserted point on the map. An additional menu will then be displayed, including an option: *Navigate to*.







OFFLINE WORK (LOCAL DATA)



The application allows to work in the offline mode, without access to the Internet. To work in the offline mode, first you need to download data for the selected area of interest to the device. To do this, select *Offline data*, in the main menu, press , choose a thematic map and select a forest inspectorate or a national park from the list .

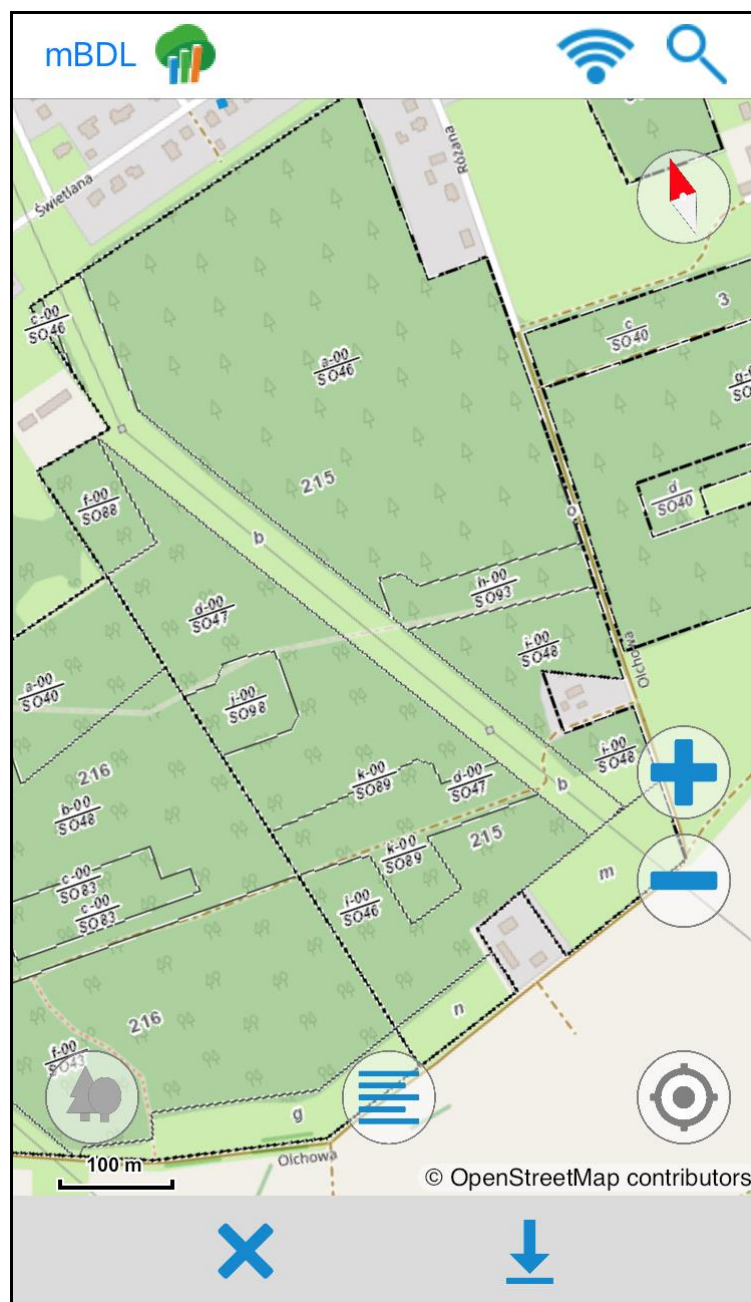
Map of ownership forms	
WARSZAWA	
CELESTYNÓW	<input type="checkbox"/>
CHOJNÓW	<input type="checkbox"/>
DREWNICA	<input checked="" type="checkbox"/>
GARWOLIN	<input type="checkbox"/>
JABŁONNA	<input type="checkbox"/>
ŁOCHÓW	<input type="checkbox"/>
ŁUKÓW	<input checked="" type="checkbox"/>
MIŃSK	<input checked="" type="checkbox"/>
OSTRÓW MAZOWIECKA	<input type="checkbox"/>
PŁOŃSK	<input type="checkbox"/>

At the same time, you can download data for three forest districts or parks, but only within the currently selected

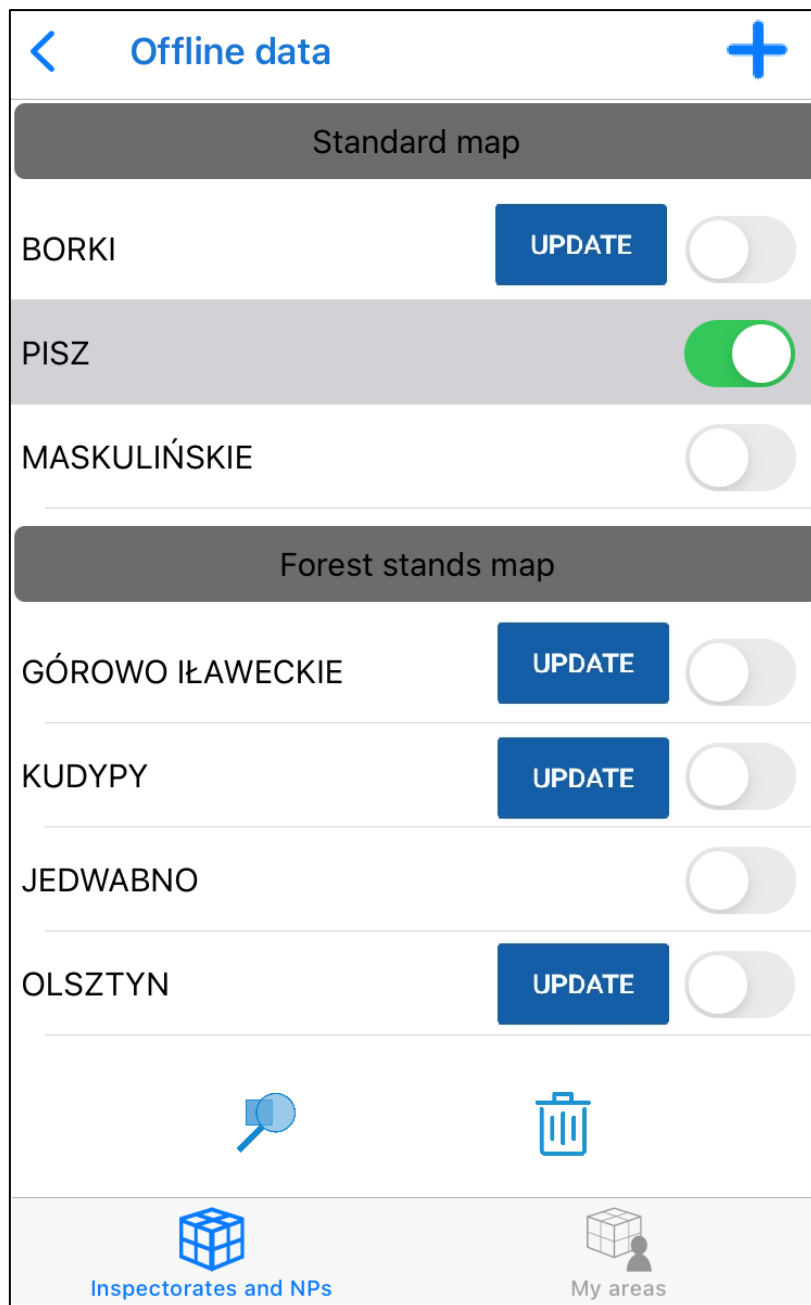
thematic map. If you want to download data for different thematic maps, select a forest district for one map, start downloading and press **+** again to select another map.

There is also a possibility to download data for any area marked on the map (maximum 10,000 ha). To do this, go to the *My areas* tab and press **+**, then set the area of interest on the screen and press *Download* button in order to download the data **↓**.



When the data for the selected area has been downloaded, select an item in the list and press .

The application also checks if the data downloaded for offline work is up to date, if new data is available then the Update button is active. Clicking on *Updates* will download the new data.







SAVE POINT WITH MY LOCATION



The menu option *Save my location* allows you to save the current coordinates under a name and optionally with a description provided by the user.

Coordinates:	
Latitude	Longitude
52.052701	20.470807
Name:	
My favourite place	
Description:	
Enter description	
	



SHARE MY LOCATION








The application allows you to share the current location of your device. In order to do that, select the *Share my location* option from the menu, then a window will appear, where you have to select the application, which will send the location. The generated location (link) on a mobile device opens the mBDL application.

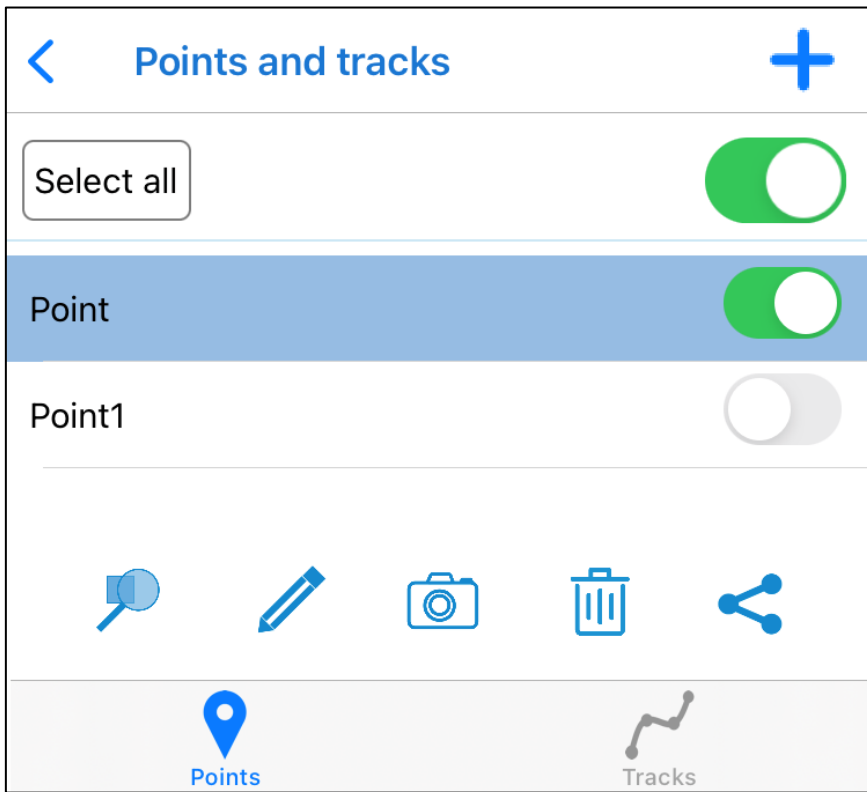


POINTS AND TRACKS



Using the *Points and tracks* window you can manage points and tracks saved to the device. On first tab, there is a list of saved points, and on the second, a list of recorded tracks. On the selected list, the user can enable or disable the item's activity. Active elements are visible on the map. By clicking on a row from the list, the user also gets the option to edit its name and description  (and in the case of the route, also its color), delete it , display its location on the map  (in this case, the selected element will be marked as active) and the ability to send data in the form of a KML or GPX file . Data saved (sent) earlier from the mBDL application can also be re-imported . When uploading data, it is also possible to choose the option to export the photo along with the point or route as a .zip.

There is also a show/add photo option where you can add a photo directly from the camera  or from a selected location on the device  .







The Forest Data Bank mobile application allows the user to add a geometric layer in the Esri Shapefile (shp) or kml/gpx file format using the Shapefiles, kml, gpx function available from the application's main menu.

You should select a file with the .kml, .gpx or .zip extension, containing shp, dbf, shx and prj files in the PUWG 1992 or WGS 84 coordinate systems.

The program also has the function of showing object descriptions as well as the ability to change the symbol's color of the added object.




Show my location button  allows you to see and track your location. Click it once to enable location services. When launched, the icon changes its appearance to  which means that the map is centered and panned to the device's location. When you zoom or pan the map, the padlock disappears from the icon. To return to the device's location, click on the location icon again.

The location tool can be deactivated by holding down the location icon for a longer time.



EMPORARY FOREST ENTRY BANS



When you find yourself in a forest range where entry is temporarily prohibited, the application displays the icon . When you click it, you will see an information on what area the ban is established and for what reason. For detailed information, please refer to the website of the forest inspectorate.

