

Search management tools

INTRODUCTION

The objective of this feature is to facilitate the coordination of teams working in the field in the search for missing persons.

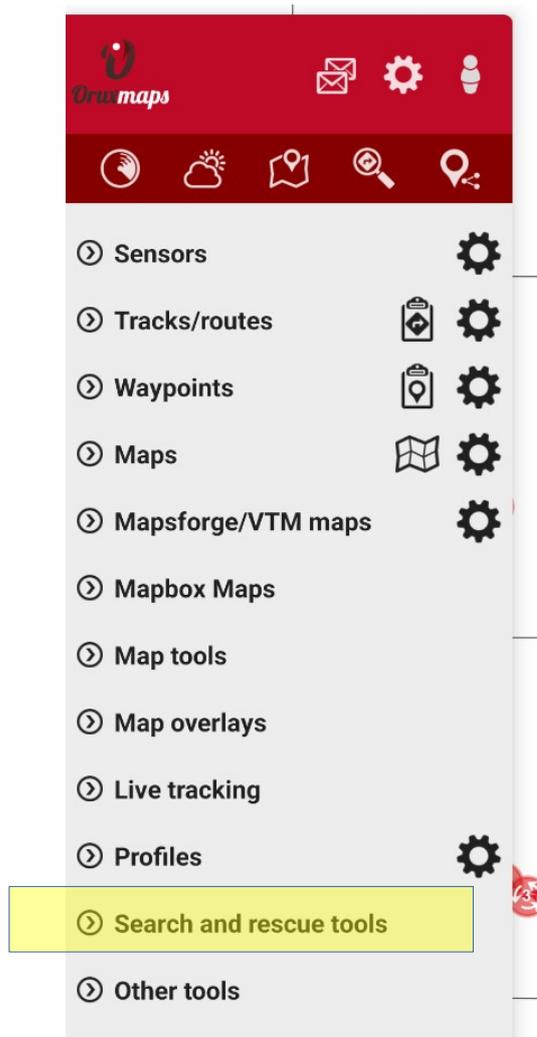
ACTIVATING SEARCH FUNCTIONS: First, make the functions visible. Go to Settings in the app, and on the first page, at the bottom > Search and Rescue Tools > Show SAR options. They are now visible in the main menu!

There are some 'administrator' features, which is the person who creates the search and all the data related to it. This feature will be part of OruxMaps itself. **It may be offered in the future as a subscription service.**

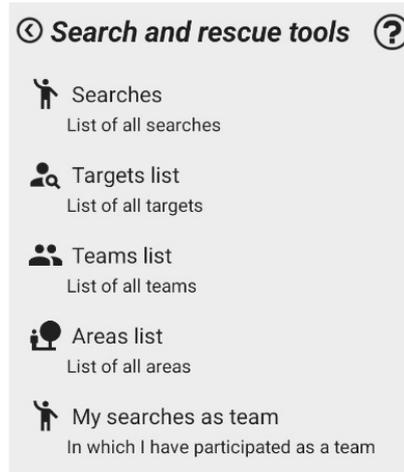
The search features will be offered from OruxMaps, and from a simple app that will be offered on Google Play, independent of OruxMaps itself, for free.

MANAGER FUNCTIONS

They are found in the left side menu (accessed from the leftmost button on the top button bar):

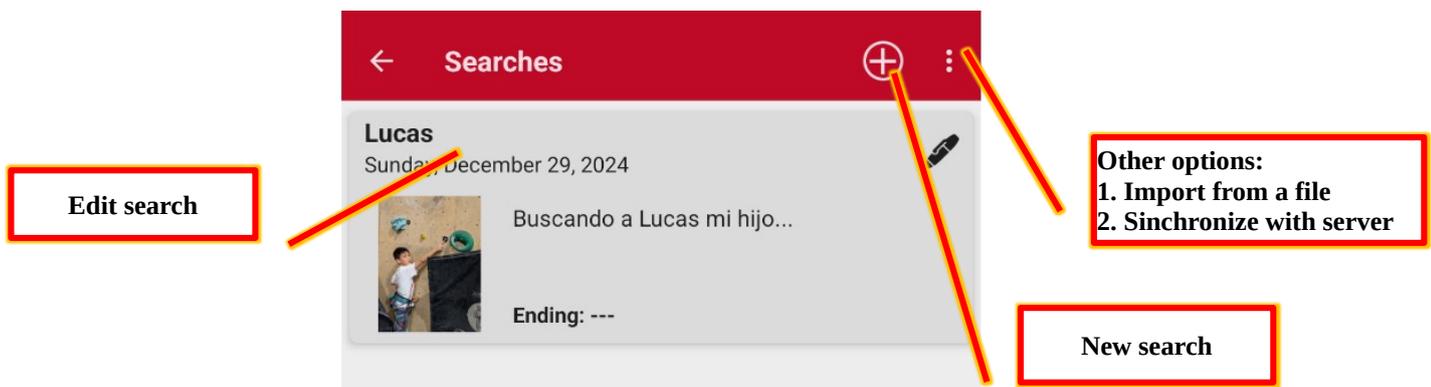


From 'Search and rescue tools' we access the lists:

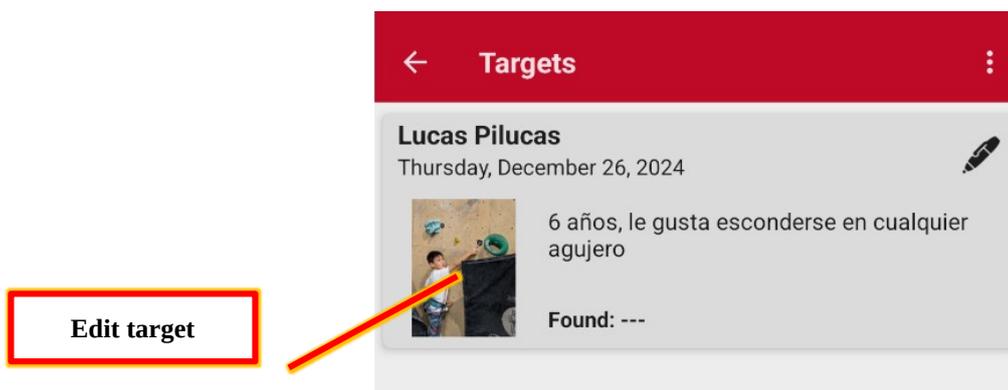


The lists are:

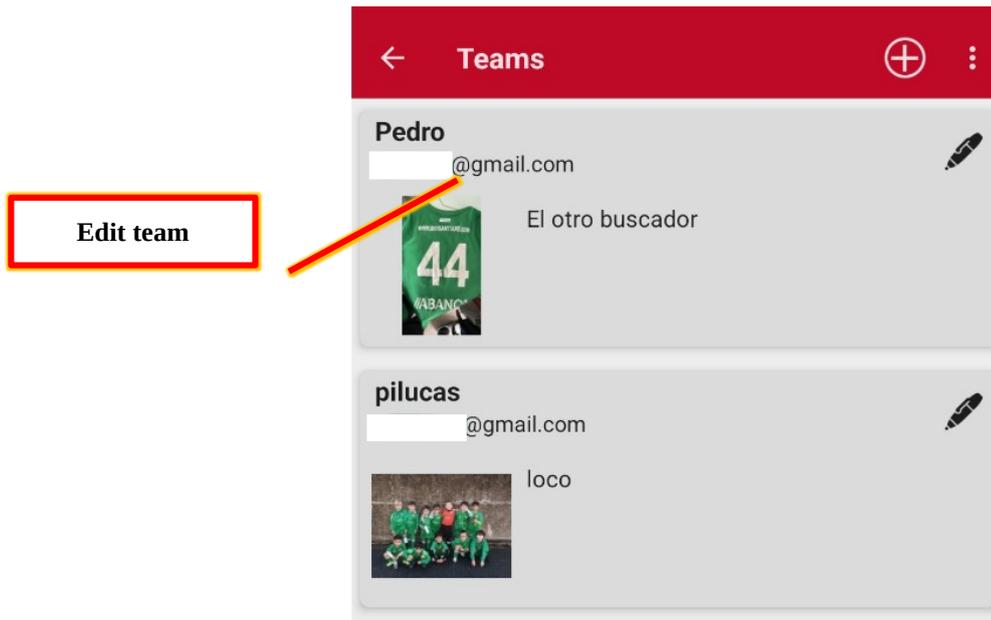
1. **Searches**: all the searches that we manage. From there we can create ('+' button above)/modify/delete (click on the search to edit) the searches.



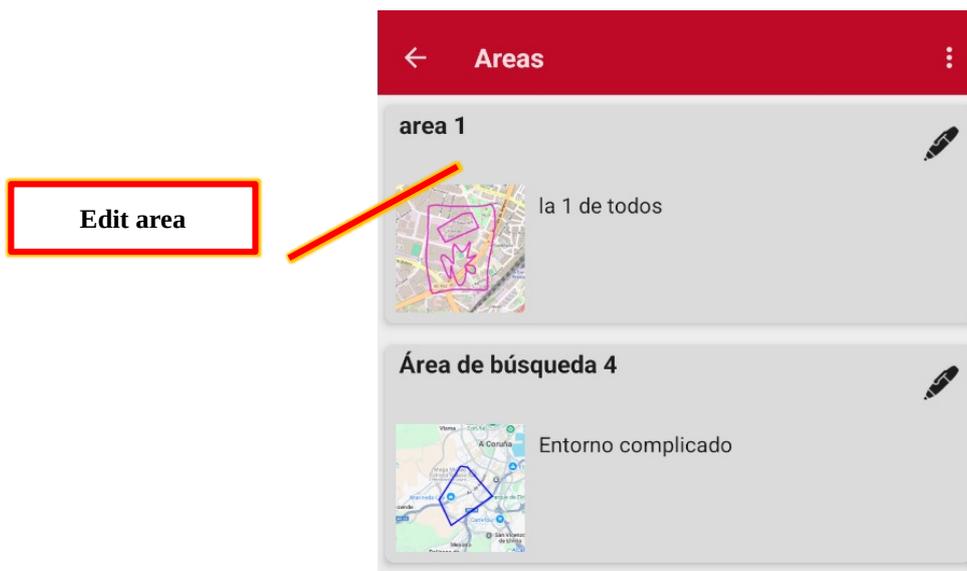
2. **Targets**: all the people to search for that we have in the searches that we manage. If we click on one of them, we can edit/view it, if it is an target created by us



3. **Teams**: all the search teams that we have created.



4. **Areas**: the geographic areas that we have been creating, delimiting search areas, either global for a search **session**, or as a delimitation/path for a specific **team**. Just like the previous ones, by clicking on one, you can edit/view properties.



5. **My searches as a team**: For when the user has been a searcher, this may be eliminated in future versions,... it is similar to list 1., but the searchers cannot edit the searches, only start their participation in those in which they are search teams, we will see this later.

Search

- A **search** requires one or more **targets** (the person(s) to be searched for).
- A **search** is made up of multiple **search sessions** (we can search for several days, each day, with different **search areas** and search **teams**).
- A **search session** is defined by a global **search area** (optional) and by a set of **teams**, each of which has an **area** of responsibility (optional).

From the **search** view we can:

- Edit **search** property fields (name, description, start and end dates of the search). We will see the usefulness of these fields in due time, especially the dates.
- Start recording a **search session** (from the 'record' button on the top bar).
- Full synchronization (top action bar, more button). With this action, all the data of that search will be downloaded, including the path of the search teams.
- Add/edit **targets or sessions**.

The screenshot shows the 'Search' interface with several callouts:

- Export data as KMZ**: Points to the share icon in the top bar.
- Start the search management**: Points to the record icon in the top bar.
- Add target**: Points to the plus icon in the Targets section.
- Add session**: Points to the plus icon in the Sessions section.
- Edit target**: Points to the edit icon in the Lucas Pilucas target card.
- Edit session**: Points to the edit icon in the Primera sesión card.

The interface includes the following sections:

- Search**: Name (Lucas), Description (Buscando a Lucas mi hijo...), Starting (SUNDAY, DECEMBER 29, 2024), Ending (---).
- Targets**: Lucas Pilucas, Thursday, December 26, 2024, 6 años, le gusta esconderse en cualquier agujero, Found: ---.
- Sessions**: Primera sesión, Sunday, December 29, 2024, El primer día de búsqueda nos centraremos en el camino donde se perdió, Ending: Friday, January 31, 2025.
- Segunda sesión**: (partially visible).

The record for each target contains the basic data, to which we can add photos. Important data will be the date of location (if set, it closes the search for that person) and the location coordinates.

If during a search we update the record of a target, and it has a location date prior to the current one, when this data is synchronized with the search engines, they will receive a notice that the target has already been located.

The coordinates where the target was found can be saved.

We can add photos, so that they will be viewed by the search teams.

Target

Name: Lucas Pilucas

Description: 6 años, le gusta esconderse en cualquier agujero

Date of loss: THURSDAY, DECEMBER 26, 2024

Date of location: ---

Coordinates: LOCATION COORDINATES

Pictures



Add photo



If we create/edit the sessions of a search, we find the properties that define a **session**. A session is defined by its name and description, a start/end date, an area that delimits the search zone and a series of participating teams. If we end the session (set the end date) then the search can no longer be activated using this session.

We can choose the search area from the list of areas managed by us or create a new one. By clicking on the area card we edit it.

The participating teams. We can add teams by clicking the '+' button or editing those that we have already included in the list.

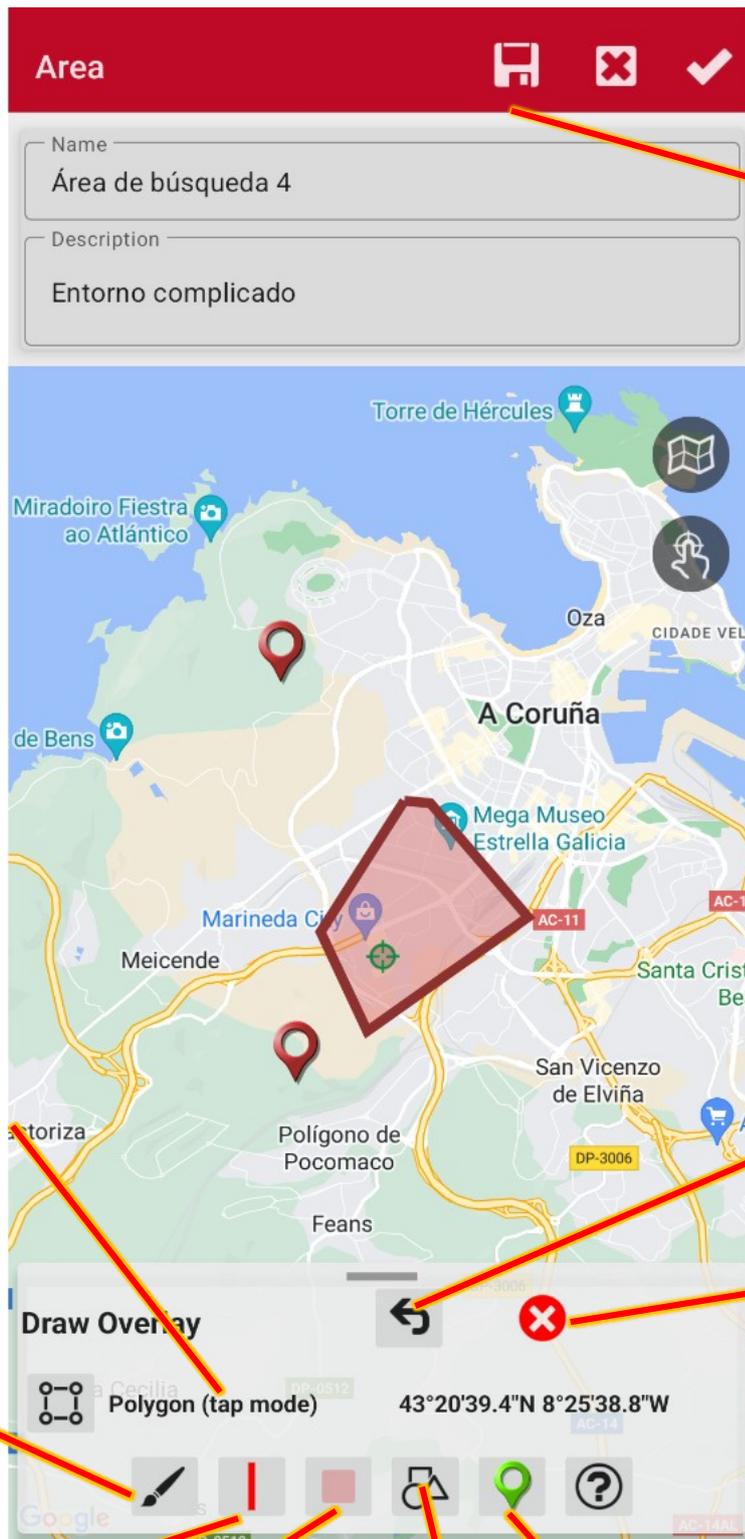
The screenshot shows a mobile application interface for managing a search session. The interface is divided into several sections:

- Session Header:** A red bar with the word "Session" and two icons: a red 'X' and a white checkmark.
- Name:** A text input field containing "Primera sesión".
- Description:** A text area containing "El primer día de búsqueda nos centraremos en el camino donde se perdió".
- Starting:** A red button with the text "SUNDAY, DECEMBER 29, 2024".
- Ending:** A red button with the text "FRIDAY, JANUARY 31, 2025".
- Area:** A section titled "Area" with the subtitle "The global area where the search occurs". It features a list icon and a card for "Área de búsqueda 4" with a map and the text "Entorno complicado". A red box labeled "Edit area" points to the list icon.
- Participating teams:** A section titled "Participating teams" with the subtitle "The search work of each team". It features a red '+' button and a card for a team with an email address "@gmail.com" and a jersey image with the number "44" and "#ABANG". A red box labeled "Añadir equipo participante" points to the '+' button.

Three red boxes with yellow borders and red arrows point to specific UI elements:

- "Edit area" points to the list icon in the Area section.
- "Seleccionar área desde el listado" points to the list icon in the Area section.
- "Añadir equipo participante" points to the '+' button in the Participating teams section.

The search area, when editing/modifying we open the painting tool:



Load the area from a file

Paint mode

Undo

Delete all

Stroke

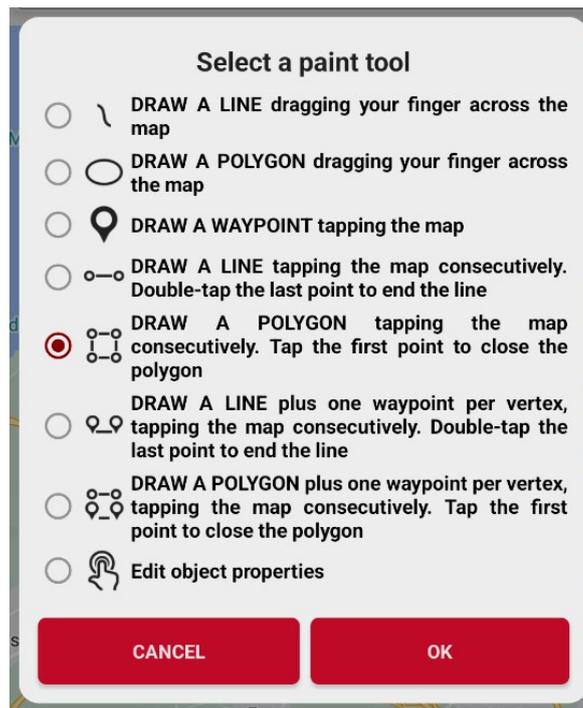
Line color

Fill color

Shape

Waypoint type

We have several drawing modes:



1. draw a line by painting directly on the map with the finger. Use two fingers to pan/zoom.
2. draw a polygon by painting directly on the map with your finger. The polygon closes when you lift your finger. Use the fill color we selected on the previous screen. Use two fingers to pan/zoom.
3. it is used to create waypoints by clicking on the map. You can modify the type of waypoint that is being created on the previous screen (waypoint type).
4. draw lines by successive taps on the map. To end a line, double-tap quickly at the last point.
5. draw polygons by successive taps on the map. To close the polygon, the last tap on the starting point.
6. Same as the two previous ones, except that it also creates a waypoint at each vertex of the lines that are created.
7. Same as the two previous ones, except that it also creates a waypoint at each vertex of the polygon that is created.
8. Deactivates painting, allows you to click on objects (lines, polygons and waypoints) to edit their properties.

Among the properties of a polygon are those to establish for them if they are:

1. Perimeter alarm: implies that it is an area that we must not leave. An alarm will sound if we leave the interior of that polygon.
2. Exclusion zone: we must not enter that area. The alarm will sound if we enter it.

When we define a team participating in a search session we have to add the name and description data, select the team and the area (optional) that represents the area of action of that team in this search session.

We can load the route made by this device from a file (if for example you have made the route using another app, or the integration with the administrator has failed). Just send us your route in gpx/kml/kmz/... format and upload it here.

The screenshot shows the 'Participating teams' screen in a mobile application. The interface is divided into several sections:

- Header:** 'Participating teams' with share, close, and checkmark icons.
- Name and Description:** Input fields for team name and description.
- Team path:** A section titled 'Team path' with the subtitle 'The route taken by this team'. It features a file upload icon and a map showing a blue route. A red box labeled 'Load path' has an arrow pointing to the file upload icon.
- Team:** A section titled 'Team' with the subtitle 'The team responsible for this search area'. It displays the name 'Pedro', an email address ending in '@gmail.com', and a profile picture of a green soccer jersey with the number '44'. A red box labeled 'Edit team' has an arrow pointing to the edit icon (pencil) next to the team name.
- Area:** A section titled 'Area' with the subtitle 'The area where the team will search'. It shows a map with a blue polygon and the text 'Área segunda búsqueda' and 'Terreno boscoso con bastantes obstáculos. vegetación densa difícil de caminar fuera de los caminos'. A red box labeled 'Edit area' has an arrow pointing to the edit icon (pencil) next to the area name.

Other red callout boxes include 'Select area from list' pointing to a list icon in the top right of the Team section, and 'Select the team from the list' pointing to a list icon in the top right of the Area section.

When we create/edit a team, we set the basic data. Among them:

1. Team name, whatever we want to define the team.
2. Email, essential that it is correct!
3. Telephone, to send whatsapps! IMPORTANT, full telephone, + COUNTRY-CODE PHONE
4. Route color: the one we want this team to appear when it makes the route.
5. Avatar: A photo or similar, identifies the team on the map.

Team

Name: Pedro

Email: @gmail.com

Phone: +6969968888

Description: El otro buscador

Route color: 

Avatar: 

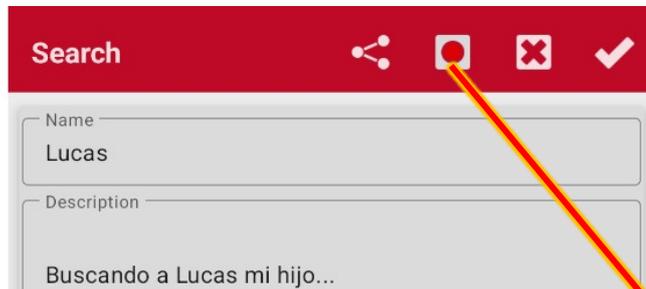
Participate in searches:

Lucas
Sunday, December 29, 2024

 Buscando a Lucas mi hijo...

Managing a search

Once we have created the search, the targets, created sessions and assigned teams to the session, we can activate the tracking of a session from the editing screen of that search:



Start search administration

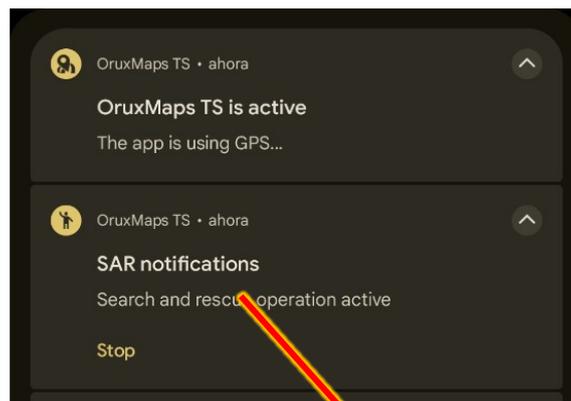
Once we activate it, the app shows us in the map viewer:

1. In the status bar of the app, an icon indicating that we are monitoring a search:



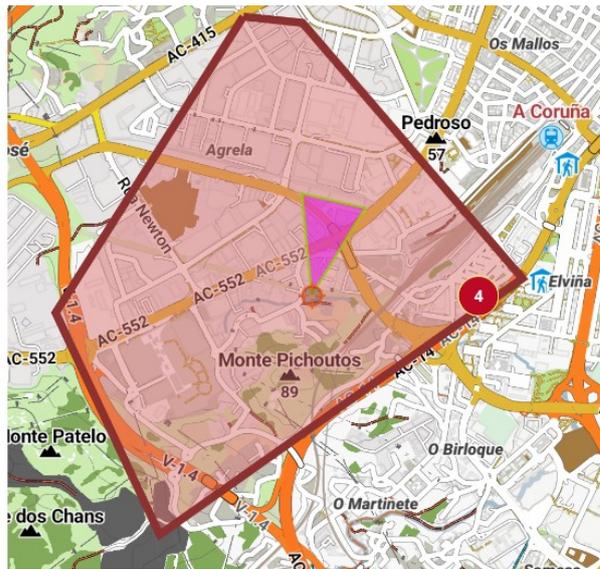
Icon searching...

2. In the Android notification bar, a notification in the same sense, which allows us to stop the search:

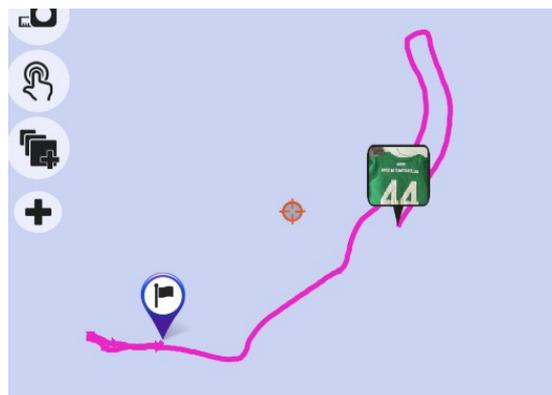


Android status bar notification

3. On the map we will see the areas defined for the different teams.



4. The route followed by each of the search teams (updated every 2 minutes approx.)



In this way we can keep track of the teams!!!

If any team finds something of interest, it can create a waypoint and add a photo to it. From the administrator viewer you can see that waypoint, its properties, and view the photo

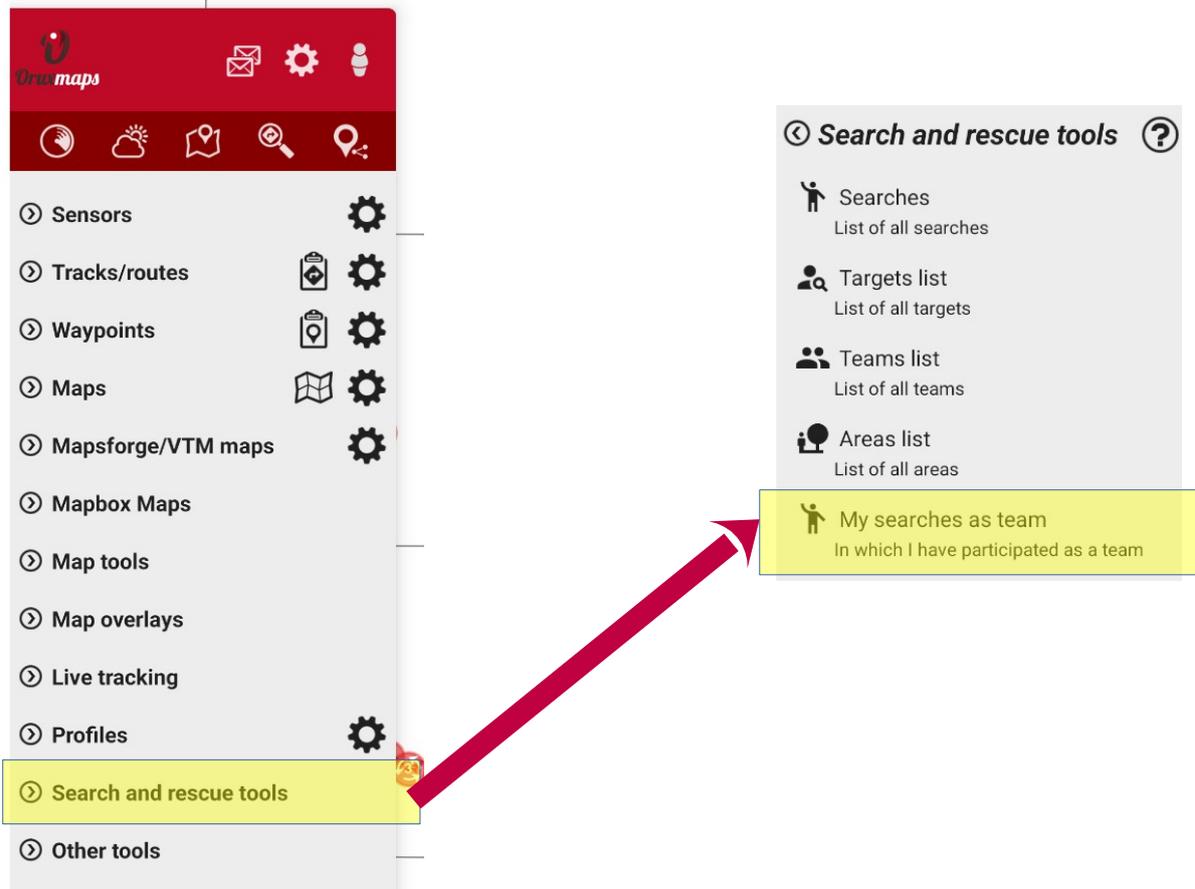
If we click on the icon of a team, we can open WhatsApp, to send it a message!

Collaborating in a search

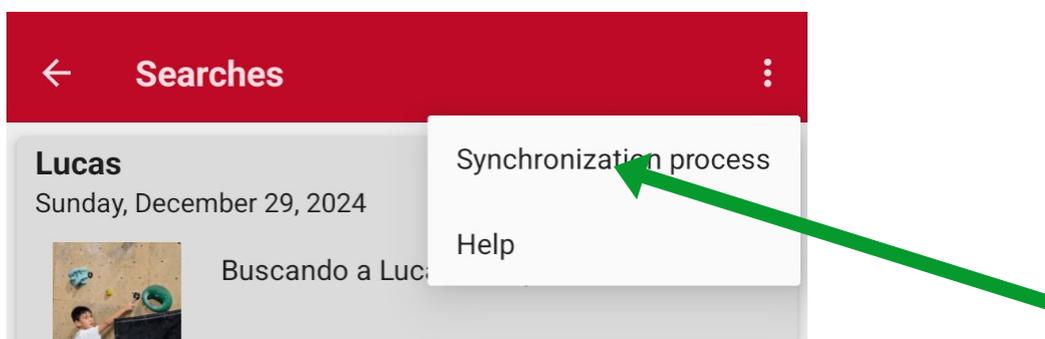
From OruxMaps (or from the future simple version OruxSAR) we can participate in a search as a team, provided that the administrator has registered us in that search for a session and the session is active.

Different ways to participate:

If we are OruxMaps users and we are registered, from the side menu > Search and rescue tools > My searches as a team.



Once in the list, we can check if there are new ones from synchronization:



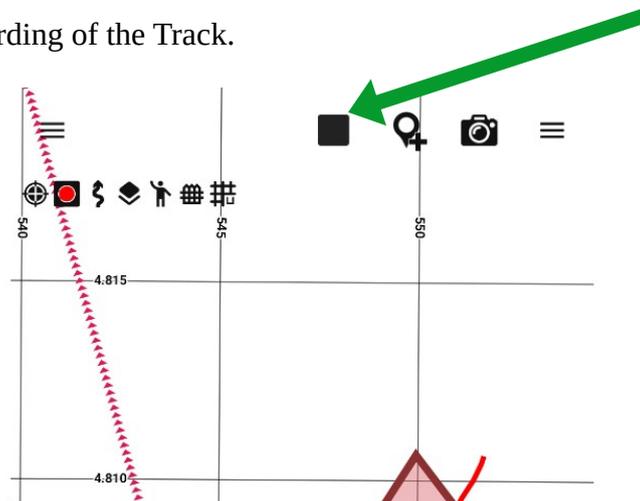
And once inside a search, if it is active, start participating in it:



At that moment we go to the map viewer. From there, the recording of our route starts, which is synchronized every 2 minutes with what the administrator sees on his screen.

From the OruxMaps viewer we can stop participating in the search in two ways:

1. Stopping the recording of the Track.



2. From the Android notification, stopping the search.

