



## Using Avenza Maps app for the MaMA Lingerin Ash Search project



(adapted by the Ecological Research Institute from "Avenza PDF Maps" guide developed by the NY-NJ Trail Conference)

### How to Download 'Avenza Maps'



#### Apple:

- Download and install the free *Avenza Maps* app from the App Store or iTunes.
  - [Click here to go to the App Store directly](#) or search for "Avenza Maps" in the Apple App Store on your mobile device.
  - *Avenza Maps* requires iOS 7.1 or later version running on an iPhone 3GS or better, 3rd generation iPod Touch or better, or any iPad.
- Open the app, and go to the Settings tab. Scroll down to General Settings, and tap 'Always Use High Resolution' to add a checkmark here. This enables an additional zoom factor to your maps.

#### Android:

- Download and install the free *Avenza Maps* app from the Google Play Store.
  - [Click here to go to the Google Play Store directly](#) or search for "Avenza Maps" in the Google Play Store on your mobile device.
  - *Avenza Maps* requires Android version 4.4 or later.
- Open the app, and go to the Settings button (3 vertical dots). Choose General Settings, then, under Import Settings, select 300 Dpi as the 'PDF resolution on import'. This enables an additional zoom factor to your maps.

### *Tracking routes when systematically searching for lingering ash*

#### How to Download Maps

- Maps in the Map Store: To find these, navigate to the 'Map Store' tab within the app and search for a location.
  - On Apple devices, the Search function is accessed by tapping the Magnifying Glass button.
  - On Android devices, the Search function appears after tapping the Magnifying Glass.

You can also search for maps near your current location without entering any specific location name. Available maps will show as markers on a background map, and you can select one of them to download. Your location is marked as a blue point.

On an Android device, click on the Menu icon located in the right bottom corner, and then select 'View as list' (which enables easier search of maps available at a location). Tap the Menu icon again, and then tap 'Filter Results'; there you can filter the type of maps you want to get. We recommend selecting 'Free Maps Only'. After applying the filter, we typically use recent USGS (US Geological Survey) maps. Participants sometimes like to use hiking maps, which are also great, but they usually have to be purchased for a small fee. After you select a map of your choice, tap it to download it onto your device.

#### How to Record a Track

To record a track of the route you take, follow these instructions:

1. Open the map you are planning to use.
2. To have the map record a track, you need to use the following steps to actively start this process (it does not occur automatically in the background).
3. Tap the Tools button on Android (:) and on Apple (...) in the right bottom corner, and select the 'Record GPS Tracks' tool.
4. You need to press the "Start tracking" button to begin recording the track.

5. The track will be collected in the background now, as long as you do not hit the 'Pause' button. Note that for most devices, the track will continue to collect even if you tap your device's power button to put the screen to sleep. This is helpful for conserving battery life, but be sure to test this out first to ensure this works on your device.
6. **Once you have finished walking your route, be sure to 'Pause' the track collection and then 'Stop tracking', and 'Stop'.** The track will then be saved in the app.
7. Tapping on the completed track name (such as "Track 1"), will bring up advanced options. Within the advanced options, you can change the name of the track.

## How to Export Track Data

To export the collected data, follow these instructions:

1. Once tracks have been collected, it is possible to export the data.
2. To perform an export on Android-based phone, go to the Layers screen, on Android tap the List button (pushpin with lines symbol on right side of tool bar). This brings up folders of Tracks that are available for that map.
3. On Android tap the Menu button and then Export Layers button. On Apple devices tap an arrow pointing away from boxes.
4. The default filename is the map name.
5. The export format should be KML. GPX is also acceptable, but KML is useful when photos are included.
6. For 'Send To' make sure to choose Email, which will allow you to e-mail the data to an email address.
7. On Apple devices, tap the 'Export to Others' text to complete the export. This should bring up a blank e-mail with the data attached as an attachment. Just enter our e-mail address, [outreach@MonitoringAsh.org](mailto:outreach@MonitoringAsh.org), and send the data.  
On Android devices, tap the 'Export' button to complete the export (not the 'Export Schema Only' button). This should allow you to choose your e-mail client (such as Gmail, etc.), where the data will be attached as an attachment. Just enter our e-mail address, [outreach@MonitoringAsh.org](mailto:outreach@MonitoringAsh.org), and send the data.

Tracks of lingering ash searches should be emailed to [outreach@MonitoringAsh.org](mailto:outreach@MonitoringAsh.org).

## *Determining whether you are in a Lingering ash or Potential Lingering Ash Search Zone*

### How to Import a Search Zones Map

To download a search zone for your region visit <http://www.monitoringash.org/lingering-ash-surveys/> and look for downloadable maps on the bottom of the page. Select a map that covers your region and by clicking on it download it to your device.

1. In the Avenza app, open the My Maps screen.
2. On an Android device, tap the Add icon ("+") and then tap "Download or import a map". On an Apple device, tap the Add icon ("+") in the right bottom corner to import a map.
3. Next, tap "From Storage Locations" and select your search zone map.
4. Your map will upload to your "My Map" screen.

### Seeing whether you are in a search zone

1. Select the "My Map" screen and tap on the search zone map that you imported.
2. Your location will appear in the map as a dark blue dot. You can zoom in by using two fingertips tapping next to each other and then spreading out.

For further help, go to the Avenza Maps Support Center <http://help.avenzamaps.com/> as it contains detailed information how to use the app. You can also email us at [Outreach@MonitoringAsh.org](mailto:Outreach@MonitoringAsh.org) with questions about use of the search zone maps.