PERSONAL RUNNER NAVIGATION

This document has been created to help our runners with their personal navigation of our courses. Before you continue, The Human Potential Running Series will mark our courses as best we can. We mark our courses with surveyor's tape and laminated signage. Each course is typically marked the day immediately preceding the event. Because our courses cover vast distances of land used by the general public, no race can guarantee that course markings will remain free from vandalism or removal. Therefore, **it is an old-school rule in our sport that it is ultimately up to the runner to know the course.**

Below are instructions for three (3) different apps that you can utilize on your phone to live track your position on our courses even when cell service is not present. **To do this, you need to set up these applications when cell service (or Wi-Fi) is available. In other words, DO THIS AT HOME BEFORE ARRIVING AT THE EVENT!** The following instructions detail how to set up these apps for personal tracking.

Note: HPRS is not responsible for a breakdown in technology. We are not responsible for the capabilities or lack of capabilities of your phone, or those who provide services to your phone. Technology has come a long way over the last 20 years, and the speed at which it is changing has only increased. Still, this technology is not perfect or error-free. It is ultimately "better than nothing" for your health and safety and for staying on course during these high-risk outdoor adventures. HPRS makes no guarantees of the 100% accuracy of maps provided, or the software used to provide those maps through these applications. You use them at your own risk, and for the better management of the risks present within our events.

LIVE TRACKING: HPRS does not offer live tracking to the outside world on any of our courses. Your family and friends will only be able to live track you through your use of the CalTopo app, or other applications that may be available to you through your phone's app store. **We will describe how to enable live tracking for your loved ones below.** The purpose of this document is to help you know your exact location while out on the course and provide a "breadcrumb" track of each course for you to follow. The following instructions explain how to use navigational apps so loved ones can track you in real time.

The Three Apps at your disposal are:

- CalTopo (iOS and Android devices) is $20/year
- COTREX Colorado Trails Explorer (iOS and Android devices) is FREE and the most complicated
- GAIA GPS (iOS and Android devices) is free when in cell range and $39.99/year when out of cell range.

CALTOPO - App/Website

BINGO TRAIL RUNS

CalTopo is an app that integrates some of the best topo maps, offline navigation tools, and planning features, seamlessly across phones, tablets, and caltopo.com. In this document, you will find links to the CalTopo website that will explain how to download the app and how to make map segments available offline. ***Many spots in the area MAY NOT have cell service*, so you will need to download the map segments in order for the app to work properly. This will let you track your location on the race course even when you're out of cell range.

CalTopo Website - https://caltopo.com/

Step 1: Download the CalTopo app onto your phone



Step 2: Open the app

Step 3: Log in or sign up.

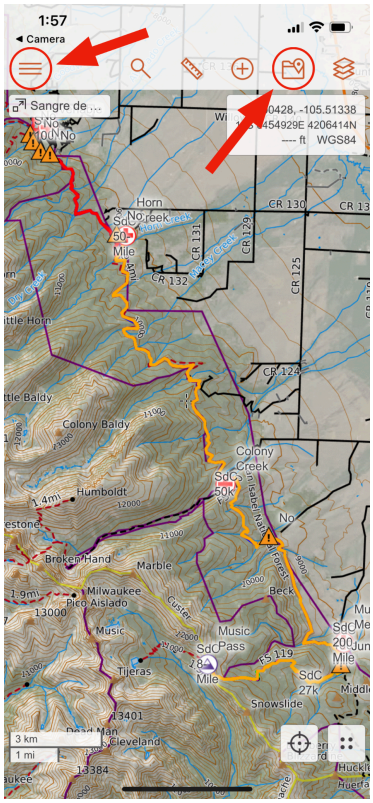
Basic use of CalTopo is free. To use CalTopo for the purposes of live tracking yourself on our courses, you'll need to purchase an individual membership, which costs a nominal fee of **$20 for a YEAR**.

If you are unwilling to purchase the $20/year subscription, stop here and move on to one of the other apps below. Once obtaining an individual mobile subscription, move on to Step 4.

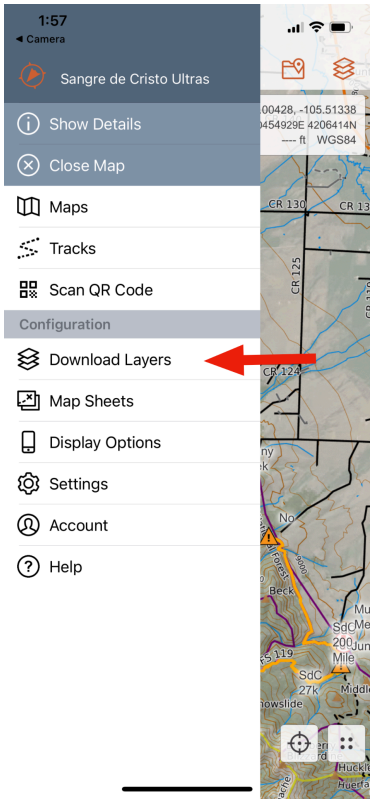
Step 4: Click here to access the Bingo Trail Runs maps on CalTopo. If you click the link using your phone, the map will appear within the CalTopo app: https://caltopo.com/m/K18CL78

Now, with the Bingo Maps open within the app:

With the app still open, click the triple line in the upper-left corner of your screen (See Image 1 below); a menu will appear. Click on "Download Layers" (See Image 2 below).



(Image 1)



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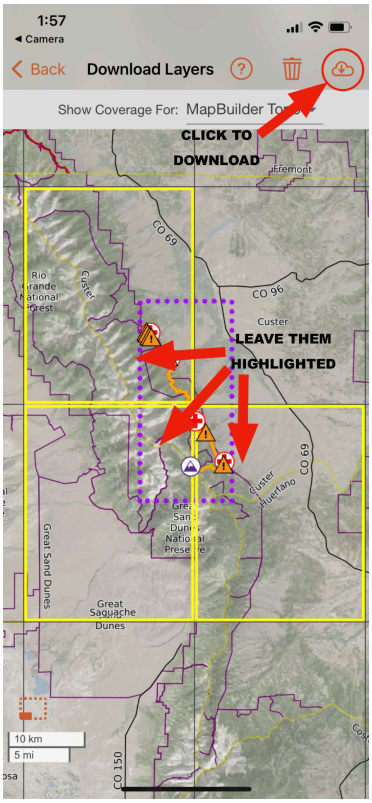


(Image 3)

- You should see one or more squares highlighted with a yellow line. These are the quadrants you are about to download (See Image 3 above). Do not touch the boxes, as they will deselect. You want them to be yellow.

- With the yellow boxes visible, click the cloud with the down arrow in it in the upper-right corner of the screen. You'll then select which map options you'd like downloaded (we recommend: MapBuilder Topo, and/or Forest Service 2016, and 'Contours' if you want more info on elevation changes), then click "DOWNLOAD."

- You now have the maps available for use on your phone when you do not have cell service!

- Click on the Folder with a 'Here' Icon on it, at the top of your screen, the second icon from the right (See Image 1 above). "Map Items" will pop up. This allows you to turn off and on the various items included with this map. This lets you turn off any routes you are not part of so you only see the route you need to focus on.

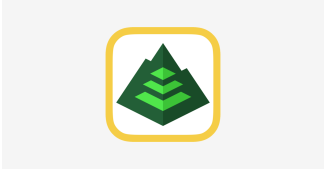
GAIA GPS App/Website

BINGO TRAIL RUNS

Gaia GPS is an app that integrates the best topo maps, offline navigation tools, and planning features, seamlessly across phones, tablets, and gaiagps.com. In this document, you will find links to the GAIA website that will explain how to download the app and how to make map segments available offline. ***Many spots on the course MAY NOT have cell service*, so you will need to download the map segments in order for the app to work properly. This will enable you to track where you are on the race course even when out of cell range.
GAIA Website: https://www.gaiagps.com/

Step 1: Download the GAIAGPS app onto your phone

Step 2: Open the app



Step 3: Basic use of GAIAGPS is free as long as you log in with an Outside account. To use the app for navigation during the race, you'll need to create a free account and log in. Once you have created an account and logged in, move on to step 4.

If you are unwilling to create an account and log in using the GAIAGps app, stop here and move on to one of the other apps on this page.

Step 4: Bingo! Course Maps

Using your phone, click on any of the links below to open the map in GAIAGps.

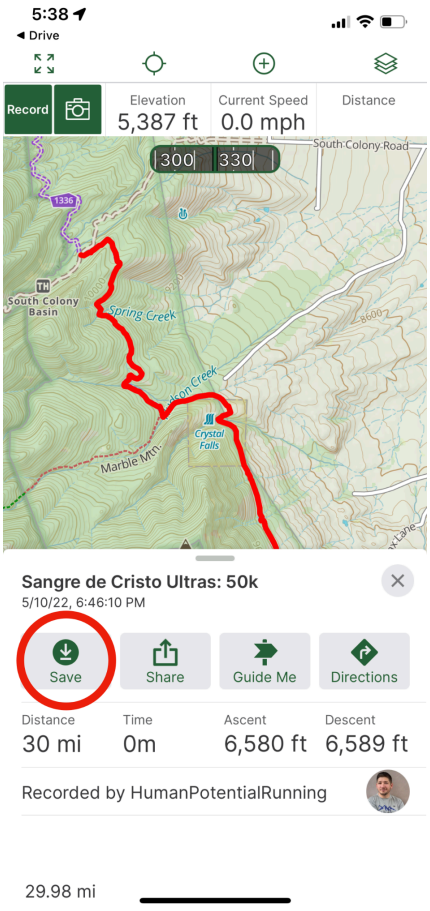
- RED LOOP https://www.gaiagps.com/public/qRflQoAT9sMpyArEa2wONFVd/
- ORANGE LOOP https://www.gaiagps.com/public/uzYbDi9uHqJnA3TBSg3f5Wr9/
- PURPLE LOOP https://www.gaiagps.com/public/7Yf1oVOgLMrZj6bYS17bS0uh/
- BLUE LOOP https://www.gaiagps.com/public/SyX6mC965ZdoIRVJIOv4Nj5k/

Step 5: At the bottom of the screen, you should see a white menu with your map title in bold at the top. Beneath the title is a row of buttons. You want to select the "save" button, which has a down arrow underlined within a circle (See Image 1 below). Once the menu indicates it has been saved by changing the icon to a green circle with a checkmark, tap the "x" in the upper-right corner of the menu.

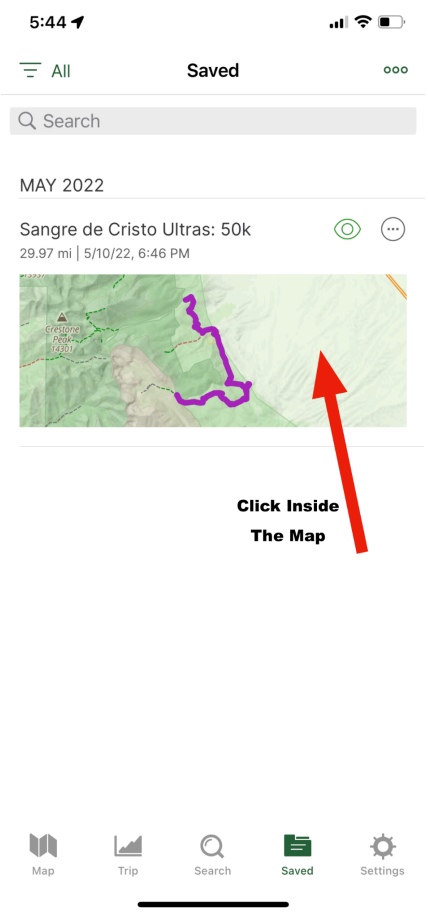
Step 6: It is important at this point to tell you that this map is now saved on your phone for use ONLY WHEN YOU HAVE SERVICE. If you want to download the map and save it on your phone for use where there is no service (preferred), you'll need to purchase either a GAIA GPS or Outside+ Subscription (of course). The GAIA GPS subscription is $39.99/yr. If you do not plan to purchase the subscription, stop here and good luck! If you want peace of mind (recommended), continue to step 7.

Step 7: At the bottom of your screen is a menu with icons. One of those icons is a folder labeled “Saved.” Click on that icon, and the saved menu appears. You should see your saved map in that folder. Click on the map itself (See Image 2 below).

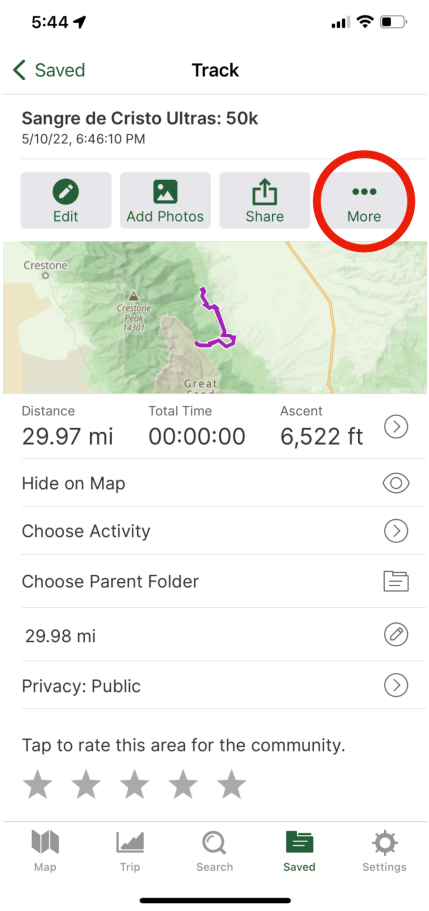
Step 8: A “track” page will open with a menu at the top. You’ll see a grey button all the way to the right with 3 dots in a row in it, and the word “More” (See Image 3 below). Click that button and a new menu slides up from the bottom. In that menu, you’ll want to select “Download Maps for Track” (See Image 4 below). Your map will now download and will be available even when you don’t have cell service. Make sure you select the kinds of maps you want (See Image 5 below; I highlighted the best), then click ‘Next.’ Name your file and click ‘Save’ (see Image 6 below).



(Image 1)



(Image 2)



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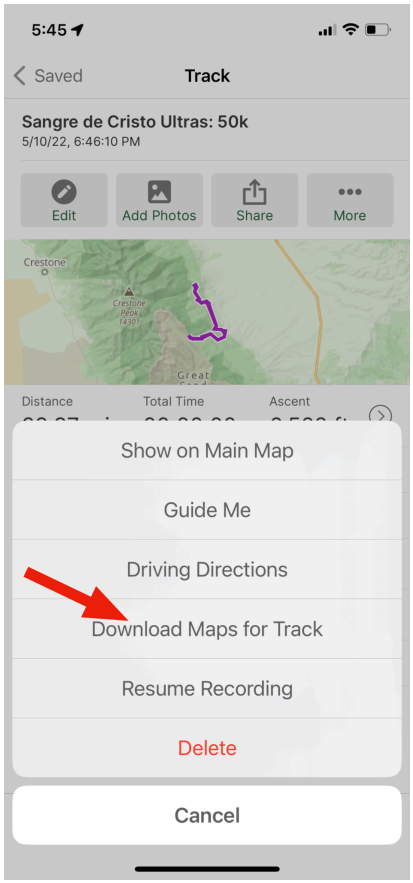

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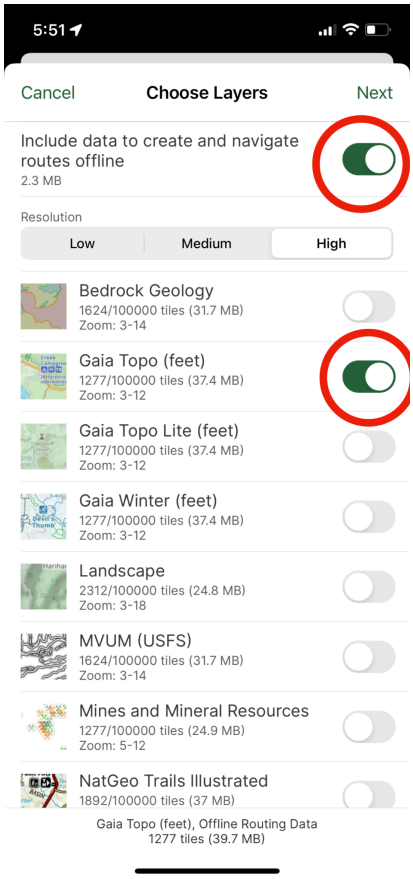
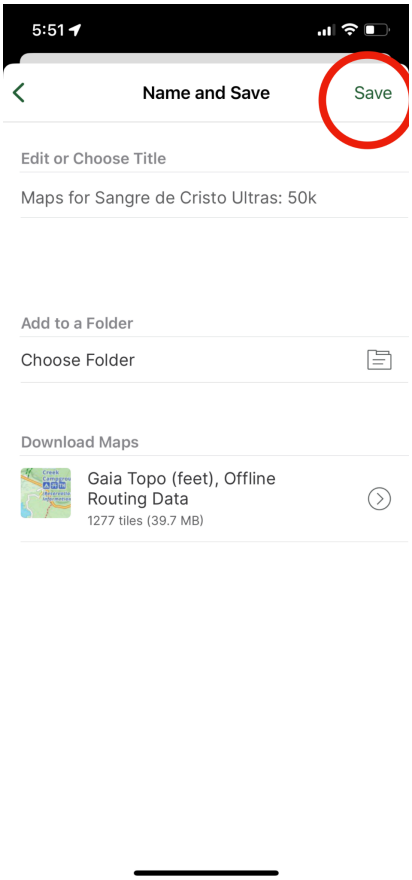


(Image 5)



(Image 6)

COTrex - Colorado Trails Explorer App/Website

Bingo! Trail Runs

COTREX is a free app that provides the most comprehensive trail maps available for Colorado, compiled from data collected by over 230 trail managers. In this document, you will find links to the COTREX website that explain how to download the app and make map segments available for offline use.

***Many spots on the course MAY NOT have cell service*, so you will need to download the map segments for the app to work correctly. This will enable you to track your position on the race course even when you are out of cell range.

- COTREX downloads and info: https://cpw.state.co.us/CTS
- COTREX FAQs: https://cpw.state.co.us/CTS/Pages/FAQs.aspx
- COTREX website: https://trails.colorado.gov/
- Tutorial by Pitkin County Library: https://www.youtube.com/watch?v=cQ6wcEUe_Zs

Step 1: Download the COTrex app onto your phone

Step 2: Open the app

Step 3: Use of COTrex is free of charge. To use the app for navigation during the race, you'll need to create a free account and log in. Once you have created an account and logged in, move on to step 4. If you are unwilling to create an account and log in using the COTrex app, please stop here and proceed to one of the other apps listed on this page.

Step 4: Sheep Mountain Maps

Using your phone, click on any of the links below to open the map in COTREX.

- Red Loop https://trails.colorado.gov/routes/207684
- Orange Loop https://trails.colorado.gov/routes/207685
- Purple Loop https://trails.colorado.gov/routes/207686
- Blue Loop https://trails.colorado.gov/routes/207687

Step 5: Once you click on one of the links above, you should be automatically redirected to the COTrex app, where the map is now open. The title of the map you clicked on should be at the top of the menu that has appeared on your screen. (See Image 1 below for Step 5)

1. Click the Heart with the word "Like" underneath it
2. Click the down arrow that is underlined with the word "Offline" underneath it

3. When you click “Offline,” an “Offline Availability” box will appear. Select which of the options you’d like (turning the selector GREEN), then click ‘Close’ at the bottom.
4. On the menu, you should now see a Green Checkmark next to the heart with “Liked” underneath it, and a Green Checkmark next to the Underlined Down Arrow with “Offline” underneath it (See Image 2 below)

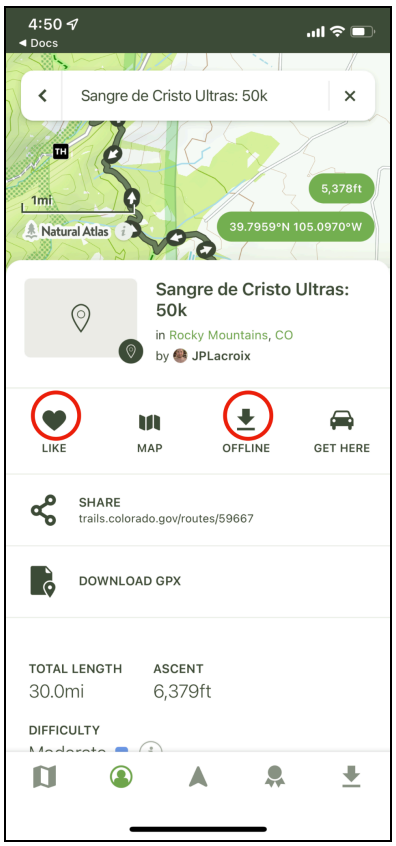
This menu can also slide up. Try that by placing your finger on the menu and sliding it up your screen. You will see a lot of other information available. There is a share link for the map that you can send to a web browser (see Image 3 below). You can download the GPX file if you want to upload it to another device, like a watch. If you keep scrolling, you’ll see the route's total distance and total elevation gain. Below that is a button for the 7-day forecast from NOAA; clicking it will open your web browser directly to the closest available forecast. Under that is the route elevation profile. The green line, located just above the profile, indicates areas with tree cover. If there is no green line (a gap or space), that spot is in the open. If you click on the profile, it takes you to an interactive elevation profile within the app. When you’re finished, click the “<” on the top menu next to the map title.

Step 6: Use your finger to touch the white menu box on the screen, then slide it down until the menu box collapses to the bottom of your screen. Now, look for the down arrow with a line beneath it in the far lower right-hand corner of your screen (See Image 4 below). Click that, and a new menu pop’s up for Offline map management.

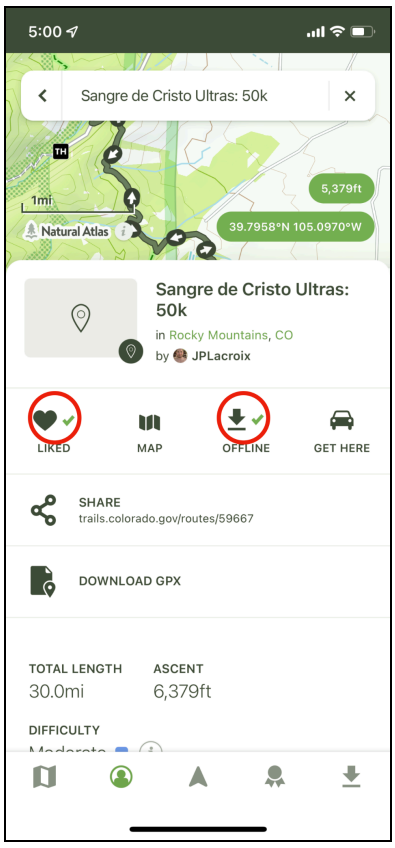
Step 7: In the “Offline Manager,” click “Topo,” which is at the top of the menu. A new menu will appear, stating, “Tap on blocks to make the map available offline.” You should see a square highlighted in bright green, indicating that the area the route follows has already been downloaded, as we did in Step 5. If you tap that green square, a new menu will appear, asking whether you want to delete the downloaded block. If you do this, select “Cancel” so we can keep this map available offline.

Also, on the “Offline Manager” menu, under the “Content” section, there is a menu option for “Featured Routes.” Your downloaded route is also saved there.

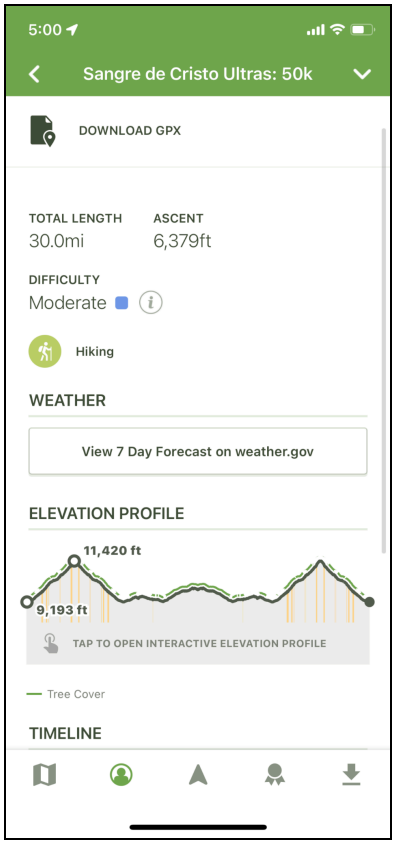
Finally, if you tap the “Up” arrow on the menu at the bottom of your screen, an App tutorial will appear to show you around for the first time. After exiting the Tutorial, whenever you press that same button, the map will center on your current location (See Image 5 below). It will also center on your current location, indicated by a dot with crosshairs in the upper left corner of the map (See Image 5 below). If you lose view of the map, click the person icon in the bottom menu. On the new menu that appears, click on “Likes,” and your route should be listed there.



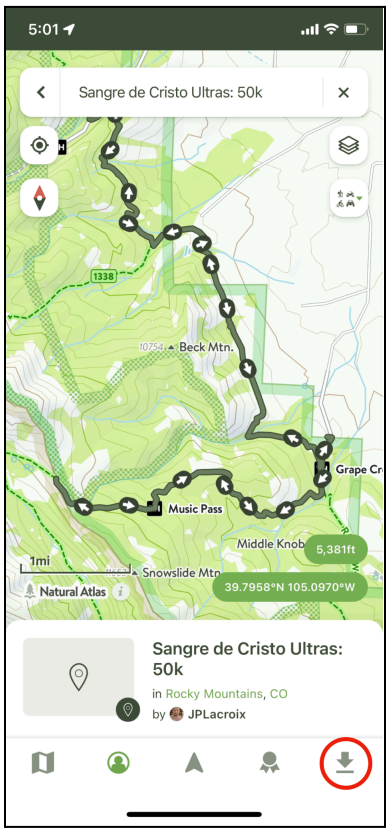
(Image 1)



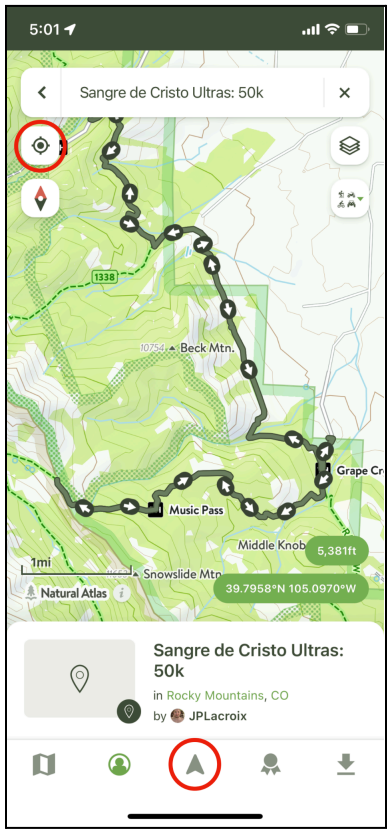
(Image 2)



(Image 3)



(Image 4)



(Image 5)

LIVE TRACKING

I wrote an article on live tracking that you can read by CLICKING HERE. If you want to understand how live tracking in our sport works (and doesn't), take the time to read the article. The following has been copied from that article for ease.

STRAVA

Strava Beacon lets you share your real-time location with family and friends as long as you are recording your journey with the Strava mobile app (on either iPhone or Android). Beacon generates a unique URL that you can share with up to three safety contacts, allowing them to follow your activity in real time. Of course, this will only work when you have cell service. So if you lose service, you won't appear to have moved on the map, and once you regain service, Strava will update your map with your most up-to-date location. Keep in mind, and your loved ones should note, that if you lose service, it will stop providing a live track of your location and will only show your last known location. This means you may appear "stopped" on course for extended periods of time, which will ultimately be cause for alarm to your loved ones.

Only Strava Subscribers can use Strava Beacon on devices other than your phone. These devices include Apple Watch, Wear OS devices, and any Garmin device that supports LiveTrack with autostart. It does not appear that this technology will work with Coros or Suunto at this time.

CALTOPO

CalTopo is a leading mapping and tracking interface for Search and Rescue, GIS professionals, and individuals. The first option with CalTopo is to record a track on a shared map. Any mobile tracks saved to a map will upload in near real time with a data connection, or as soon as a data connection is reestablished. This function allows real-time tracking for anyone viewing the map if team members in the field have a reliable data connection (Cell service). You can also record a live track using a locator like Garmin inReach.

The second option lets you add your device as a "locator" to a map you've already created. So theoretically, you could download the GPX file for one of our races, upload it to CalTopo, then use your phone as a locator. You'd share your created map with family and friends, and they can see you on it. Here's How: CLICK HERE

FIND MY iPHONE

Did you know that you can share your iPhone's location with any of your other contacts who also own an iPhone? Here's how:

On your iPhone, go to Settings. Scroll down to "Privacy" and tap it. Make sure "Location Services" is turned on (green), and then touch "Share my location." On this next page, make sure "Find My iPhone" is turned on, as well as "Share My Location." Now, leave Settings and go to your contacts. Click on the contact you want to share your location with. At the bottom of their contact screen, it should say "Share my location." Tap that, and you'll have the option to share indefinitely, until the end of the day, or for one hour.

For your family member or friend to see your location, all they need to do is open the “Find my iPhone” app on their iPhone. At the bottom of the app’s screen, on the far left, it says “People”… and this is where they will see your phone's last known location (with service) on a map. Boom... your family can live-track you while you run.

GOOGLE MAPS

Open Google Maps on your phone. Next to the search bar at the top is your profile picture; click it. A menu will pop up. Look down the menu, and you’ll see “Location Sharing.” Click on it. On the next page, click the “Share location” button to share your location. The next menu lets you choose how long to share your location and which Google contacts to share it with. If you click “More options” at the bottom of the screen, a “Share with a link?” menu will pop up, and you can send that link to any of your contacts or via email.

OTHER PHONES & APPS

Android devices can use Google’s app called “Find My Device,” just as iPhone users can use “Find My iPhone.” To find out more, CLICK HERE. I also found this article discussing how to track an iPhone with an Android Phone, CLICK HERE, and this article on how to track an Android phone from an iPhone, CLICK HERE.

There are other similar live tracking apps on the market as well, such as Life360

Finally, if you haven’t familiarized yourself with the new Apple Watch Ultra or iPhone 14 (yes, we know they’re expensive), you owe it to yourself to explore the new technologies on these devices that let you live-broadcast your location to loved ones and Search and Rescue personnel.