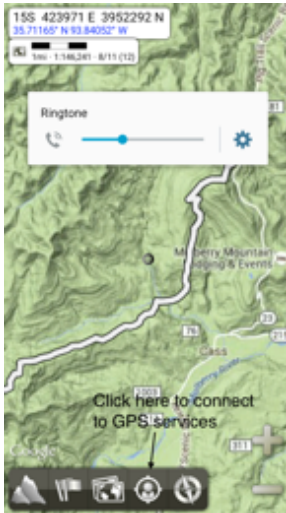
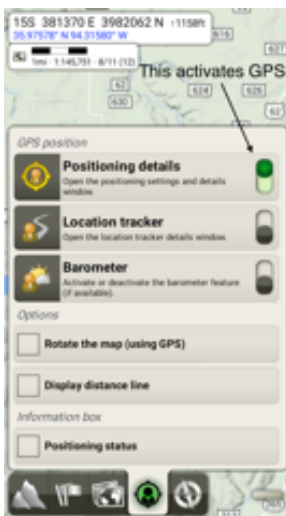


## Using your Smart Phone to Help with Trail Maintenance

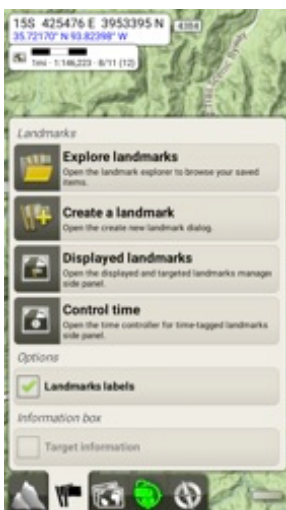
Many hikers now routinely carry their smart phone with them when they hike. Even when you don't have cell service, you can use your phone to help with trail maintenance. There are several apps, many free, you can use to create waypoints, often attaching a photo, that you can then send to our Maintenance Coordinator, providing them with gps coordinates and a photo of the trail issue. The following descriptions are for AlpineQuest on an Android phone. There are other options available, but all work essentially the same.



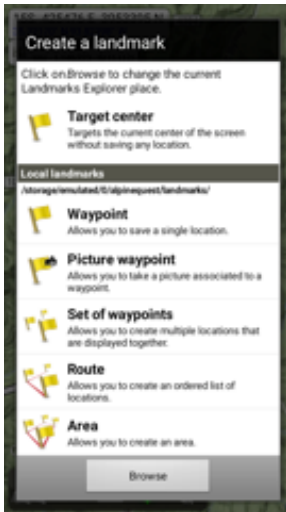
First, you have to make sure your location services are turned on and utilizing the gps built into your phone. With AlpineQuest, if they are turned off, AlpineQuest will let you know and take you to your settings to turn it on. Open the AlpineQuest app. This app provides you with the option to select a number of different base maps to use: including Bing maps, Google maps, USGS topo maps, and others. My personal favorite is Google Terrain with the USGS Roads Layer overlaid on top. Click the image of the person in the compass rose to connect to your gps.



Here, you see that AlpineQuest has been connected to the GPS in your phone.



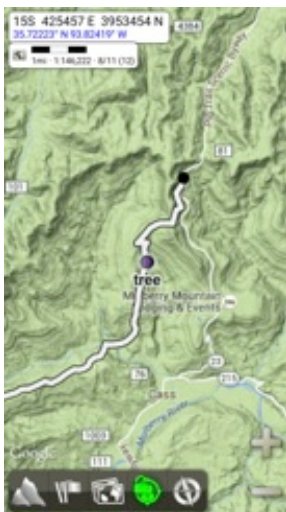
When you come to a trail issue, click the flag icon to open the waypoint menu. We are going to choose, "create a waypoint." When you "wake up" your phone and the app, it may take a few seconds for the gps and app to catch up to your current location. You can watch the screen and wait for the location circle to decrease in size and turn from red to blue.



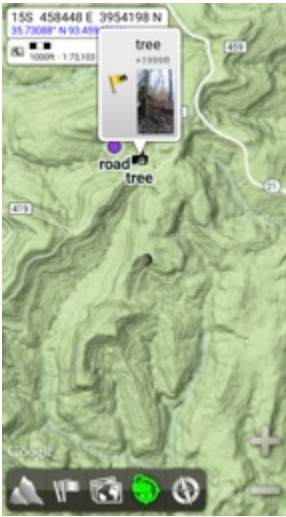
Here, you can choose whether to just create a waypoint with gps data and description or also attach a photo. If you create a picture waypoint, it will open your camera, take the photo, then return to AlpineQuest. The photo is stored just like any other photo you may take. It is linked to the waypoint in AlpineQuest but it is not actually a part of the waypoint. This will be important later when we try to send the waypoint to the Maintenance Coordinator.



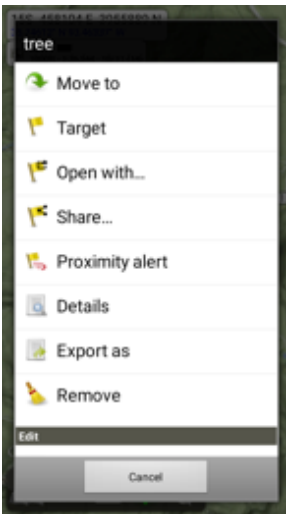
We are going to name this waypoint “tree.” Notice that it has automatically generated the gps coordinates for the tree (I use UTM coordinates). Make sure when you are creating your waypoint, that the centering dot on the screen is on your location. Sometimes you can accidentally swipe across the screen, moving the centering dot from your current location. This will create a waypoint wherever the centering dot is and can result in a bad location.



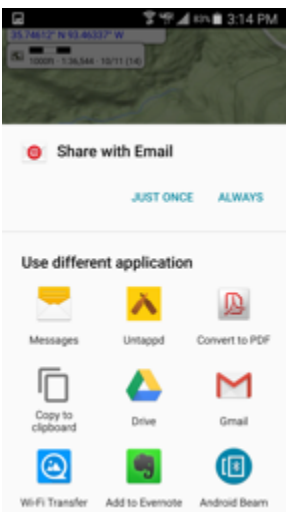
Once we have saved the waypoint, you can see it on the screen. In this sample, I have only saved a waypoint and not a picture waypoint. This imaginary tree is located on the trail just before reaching the Cherry Bend Trailhead on Hwy 23. Note that the image of the trail will not appear on your maps. This is a “track” I recorded while hiking the trail. Google Terrain does show the OHT when zoomed in sufficiently. I don’t know where they got their information. It’s close but doesn’t always correspond with where the trail is now.



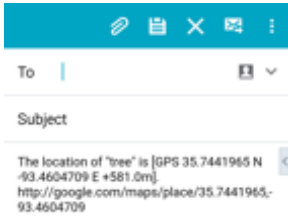
If you tap on the waypoint, a box will open up and this is what you will see. Notice in the box there is a yellow flag and then the photo to the left (we are now looking at a different picture waypoint I took on Moonhull Mountain of a tree that fell between Christmas and New Year's Day). This is where you will send the waypoint to the Maintenance Coordinator. You want to tap on the yellow flag and not the linked photo in the box. If you click on the photo, the photo will be sent, but not the gps coordinates of the waypoint, which is basically useless.



When you tap on the yellow flag, this menu opens up to allow you to work with the waypoint. We are going to "share" it.



The app will give you several possible ways of sharing the waypoint. Choose email (or gmail if that is what you use). Note that you can select to always use your selection or pick a share method each time you do this.



The app switches to your email application. Notice that it has added the location of the waypoint in the body of your email and also created a hyperlink to Google Maps. When someone gets this email, they can click this link and Google Maps will open showing the waypoint. Notice also that Google uses Degree Decimal format for all its location services. AlpineQuest knows this and has converted the UTM coordinates I use to Degree Decimal format.



You just need to type [OHTmaintenance@gmail.com](mailto:OHTmaintenance@gmail.com) in the To field and something appropriate in the subject field. Then click on the paperclip (or whatever your mail app uses) to attach the photo. You will find it in your normal photo gallery. Remember, the photo is linked to the waypoint but isn't a part of it. When you share the

waypoint, it doesn't automatically attach the photo. But if you click on the photo, you don't get the waypoint. It's easier to attach the photo to an email with the gps coordinates automatically entered.

This is a much more accurate and informative way of reporting trail issues than the old "there's a tree down between mile marker 67 and 68." This give us exact coordinates and a photo to see what we will be dealing with before we go out. Thanks to all for reporting issues on the trail.

Similar apps on Android are Backcountry Navigator (free and pricey versions). For iPhone you can look at Backcountry Navigator (free and pricey versions) as well as Motion X GPS (\$1). Trimble, Magellen and DeLorme also have apps that do similar things for both Android and iPhone. If you have a Windows phone...why?