

GPS Tracks

Hey, welcome back to Aaron and Carl, the GPS guys and our online GPS class. I'm Aaron, and Carl will be playing Mr. Finger. In this segment we're going to cover how to collect tracks. As with waypoints, there are a few preparations that need to be done before we get started. We'll demonstrate how to set up your active track logs, how to collect tracks, and how to get an area calculation by the time we're finished.

A track log is a sequence of GPS positions that can be converted into points, lines, or polygons in GIS using software called DNR Garmin. The points are captured at regular intervals and saved into the active track log as long as the receiver is (A) turned on, (B) the active track log feature is turned on, or (C) until the track log memory is full. A new track log segment is created every time the active track log is either cycled on or off and each time the receiver is turned on or off. An active track log or portions of it may be copied or saved into a track. It's important to recognize that this is a generalized version of the active track and it is not as detailed as the full active track log. If detail is important, keeping the information in your active track log is also important. If your GPS has a micro SD card, you can select to have the tracks automatically saved onto that micro SD card and it will retain all of the information. Most of these types of receivers can accommodate about 10,000 GPS positions in the active track log and about 20 saved tracks, although some models have more or less.

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The first thing we're gonna go to is how to configure your active track log. So if we can get started, Carl, by pressing menu menu. The very first option here, as long as you haven't changed any of your page sequences, will be tracks, so if we can go ahead and hit enter on that. We're gonna need to do some setup, but I want to get you a little familiar with this screen. At the very top over here there is an on and off radio button, and this will be the selection you'll make to turn that track log on or off or to start collecting a bread crumb of waypoints as you walk along. The next part is a bar graph that shows you how much of your track log you filled up. The next part that you should be aware of are these four buttons: the setup button, the save button, the clear button, and the track back button. Those buttons are gonna be the major features that you're gonna be interacting with. Down below here you'll see where all of your saved tracks are located. So the first thing we want to do is to go to the setup button and select setup with the rocker button and the enter button. There are a couple features here when setting up this information that you need to be aware of. First, you want to make sure that rap when full is not checked. The reason you don't want to check this is that if it's not checked when you run out of room it'll at least let you know that you need to do something different. If wrap when full is checked and you fill up that slider bar or that bar graph, it's just gonna start writing over your old tracks. You at least want to have the GPS let you know that it's gonna start erasing or removing some of your data by writing over it.

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The next thing you want to be aware of is the recording method. So a track log is usually either a line or a polygon feature that you're trying to collect, and when you are collecting it you're leaving a bread crumb trail of waypoints automatically that you can later pull out. The recommendation that we have is that you always choose time. It's always a known feature that you can select, and unlike auto or distance you can manually adjust it by just stopping where you are while you're collecting a track. So we're gonna select time there. The interval that I recommend starting with is about 5 seconds. I think that's a good starting interval to use if you're in a car, if you're walking, or even if you're in a helicopter mapping a fire. If you need a little more detail, you can decrease that down to 1 second, or if you need a little less detail, you're driving a long road, you can increase it to 10 seconds, but 5 seconds is a good place for the basic user to start, and Carl just changed that to 2 seconds. You can also choose what color your active track log will be on your map, and we have selected red here, that shows up really well, but you can change that selection to whatever one that you like. The next thing down here that's kind of important is the different colors you can choose.

The next feature down here in the setup of collecting tracks is the data card setup. The data card setup allows you, when you go to it, to choose to have all of the tracks saved to the data card. If your GPS unit has usually an X in its name, like our unit is the GPS map 76CSX, usually that X implies that there is a data card that can be inserted. I always recommend having this saved because

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if you do that all of your active track logs will be automatically saved to your data card in its full length.

Okay. So now we're gonna go back and actually start the process of collecting some tracks. In this particular situation, the first thing you want to make sure and start off by doing is setting your active track log to be 0, and we do that by pressing the clear button. Doing that, it gives you a little warning to make sure that you're ready to actually do that, and then this slider bar graph shows 0%. That means you're ready to start collecting new tracks from scratch. Now if you want to start collecting a track we've set it up, so the first thing you need to do is move your track log over to on. Once that button is pressed on and highlighted, you can see you're starting to get some data being collected in here and you're starting to leave that track of bread crumbs behind you, waypoints positions behind you that you can later turn into lines or polygons, whichever you're looking for. So if you need to stop at some point in time in the middle of collecting a road segment or a section of hand line, you can always turn that radio button off and go back to collecting that line. The best example I have for this is that you're collecting a section of line that you've just dug and a division sup comes along and wants to talk to you. You can turn that track log off, leave that line, go talk to him, and then start back up and collect the rest of that line in one segment.

The next thing that you can do is you can save that portion of your active track log. The term save is unfortunate because it's actually a generalized or

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simplified copy of the active track log segments. It's important to recognize that when you save your active track log you're going to lose some of the information in it. It's gonna give you some information that's important, but at the same time it's gonna generalize that particular line, and so you want to be careful on whether or not that's what you're actually doing. If we go down to this saved track, we're gonna see some important information that will assist us. This is a track that we set up earlier, and the important thing I want to show is once you save a track it'll give you an acreage calculation on it. So if you were walking the perimeter of a fire and you get to the end of the fire and you hit save, it'll give you a quick reference on how many acres or the area inside that perimeter is. You can also change the name of your active track or the saved track to anything that you want it to be to help you keep it in mind, but the default will be today's date and the tracks will number 1, 2, 3, 4, 5, 6 as you continue to save on. At this point, you can choose to delete that active track or you can show it on the map and see where that track actually is. We'll just show this track really quickly on the map, and you can see that's the track that we used to get from our hotel to the National Training Center here.

Alright! Well in conclusion, that's the basic of tracks active and saved.

Remember to give some thought to your settings before your track log and you start collecting data, especially the interval for collecting the data and whether to wrap or to stop when full. You don't want to get to the end of your tracks only to find that you've lost some data. Our next segment will cover navigation.