

SAVEM—SAMAB's Southern Appalachian Volunteer Environmental Monitoring Program

Operation of Garmin GPS 12XL Standard Procedure for Marking Latitude/Longitude Coordinates (Waypoints)

Step-By-Step Process of Entering Waypoints:

Step 1 Turn on GPS by depressing button with “light bulb” symbol. Allow 5 minutes or so for GPS to “find” satellites. Turn off the GPS the same way when you are finished

Hint—You know you have enough satellites to give you adequate readings when you see on your satellite page at least three power bars at bottom of screen which correspond to satellites that are shaded in bold.

Step 2 To record waypoints, press the “Mark” button. This will immediately change the page on the GPS to a page that indicates the waypoint number you are currently taking and the approximate latitude/longitude coordinate of that waypoint.

Step 3 At the bottom of the screen, you are given the option of “saving” that waypoint or “averaging” that waypoint. You want to average that waypoint. So, scroll your cursor (the black shaded bar on your screen that is used to highlight selections) to average and press the “enter” button.

After you press enter, the screen will adjust to a new page that gives you a +/- accuracy statement. The number will probably move around from 15-45 feet or so. When it stops moving or after 15-20 seconds, scroll the cursor to “save” and click the “enter” button. This will save your waypoint. It will be saved at a higher degree of accuracy than if you had saved it earlier without averaging.

Congratulations! You have now entered your waypoint and have recorded a longitude and latitude coordinate from which you can enter corresponding data on your data sheet. Be sure to record the latitude/longitude coordinates on your data sheet just in case the waypoints in your GPS are lost for some reason.

Other Important Notes:

- Do Not Delete waypoints until you have downloaded and sent them to me via email. If you do another day in the field before downloading, just start the waypoint numbers on your data sheet from where you left off.
- To see your list of waypoints, just press the “page” button until the page appears that has “Waypoint List”. It should be the second item on the list on that page. Scroll your cursor to that item and press enter. It will bring you to a page on your screen that shows you all of your waypoints. To check latitude/longitude or other information about a particular waypoint, just scroll your cursor to that waypoint number and click “enter.”
- The GPS takes four double AA batteries. Use good ones. Change the entire set when you change. Save your receipt and send to me and I will reimburse you for those expenses. Readings will begin to suffer when the GPS power bar on the satellite page shows ¼ full or less.