

Minnesota DNR GPS: How to create shapefiles from GPS waypoints

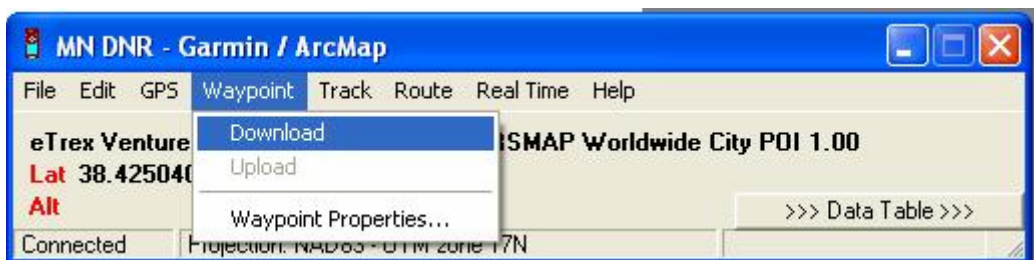
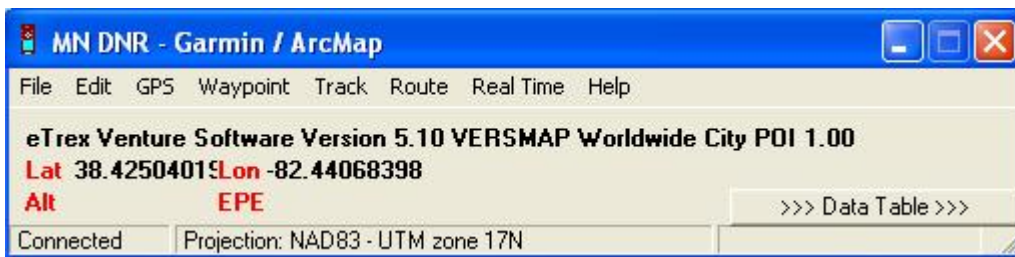
MN DNR software can be used to place geospatial data into an applicable format known as a shape file. Shape files are the “Latin” of GIS and can be easily viewed in a variety of formats including ARCGIS software such as ArcMAP, open source software such as Quantum GIS, and web viewers such as Google Earth.

The software can do this two ways: (1) by directly downloading waypoints and tracks from Garmin Venture GPS units and converting these points and tracks into shape files and (2) by opening a GPS Exchange file (*.gpx) that has been produced by other software such as GPS TrackMaker and then converting its geospatial data into shape files.

Shape files also include an attribute table that includes fields or attributes such as UTME and UTMN. These fields can be used to not only locate the position of points but also can effectively link the point into a number of GIS applications. Shape files are useful because additional attributes or fields can be added that contain informative historic or environmental data.

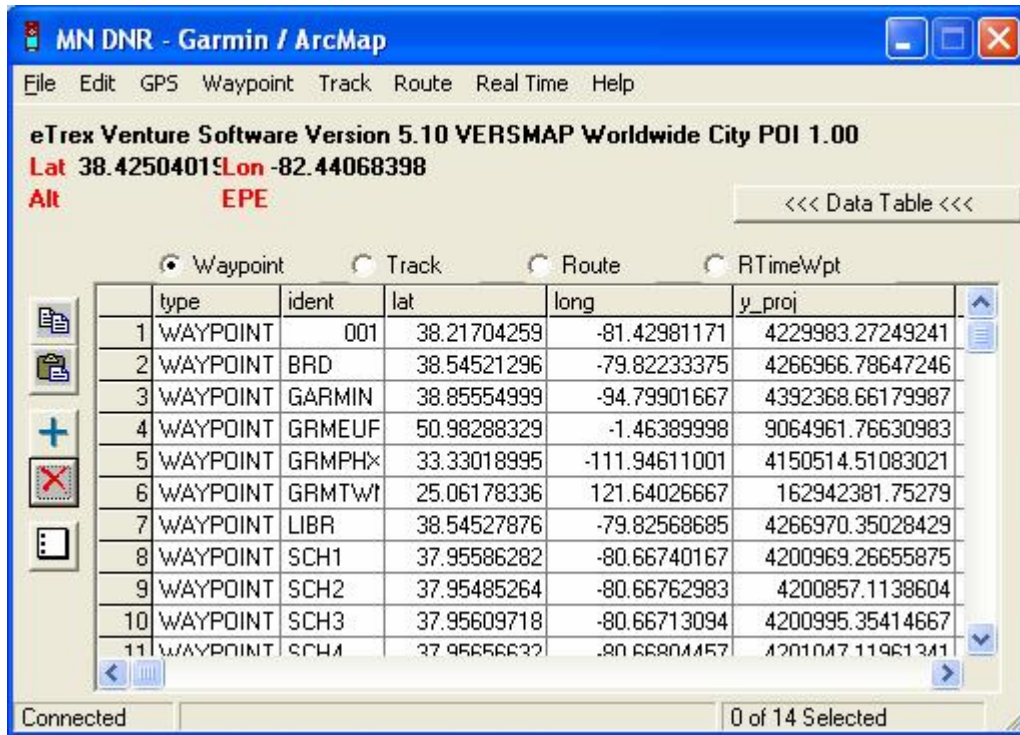
Producing shape files by downloading waypoints:

Open Minnesota DNR software and Click...Waypoint...Then Click Download...

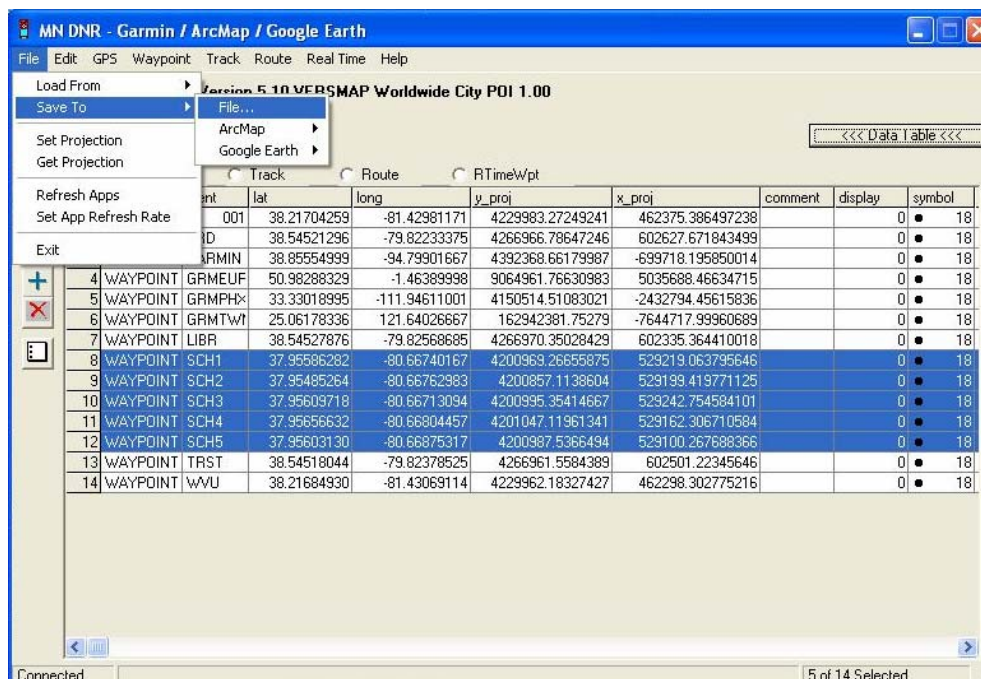


The software should identify your Garmin as an eTrex Venture and download waypoints into the table represented below. Note that all waypoints are downloaded and not only those that are of interest to you presently...e.g. those most recently marked.

As shown in the image below, you must first highlight those waypoints that you intend to include in the shapefile. In our example, we are making a shapefile of the points around Western Greenbrier Middle School, points #9 through #11.



The “Save As” box will appear. Scroll down through the options in the “Save as Type” blank and select the option for shape file (.shp). Then name the file appropriately and indicate the designation in the “save in” blank. Now save the shape file.



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The shape file can now be viewed in Google Earth. The simplest option is to open GPSTrackmaker, select file and open. The shape file can also be viewed in the MN DNR software that you now have open. However, this will involve a few additional steps.