# GPX Plug-in for ArcGIS

**Importance**

GPX (the GPS eXchange Format) has become the de-facto standard for lightweight exchange of GPS data (waypoints, routes, and tracks) between devices and applications. All modern Garmin GPS devices use the GPX format. ESRI does not support GPX. Being able to view GPX data directly in ArcGIS significantly streamlines many common GPS workflows.

**Background**

ESRI does not provide any ability to directly read GPS data, and consumer-grade GPS manufacturers do not save their data in an ESRI supported data format. This disconnect has lead to a proliferation of third party tools and processes to extract data from a GPS device so that it could be converted to a format that could be viewed in ArcMap. The process was often confusing, and frustrating for the casual user. Often the user needed to go through these steps just to preview the data to see if it was what they needed for their project.

The GPX Plug-in allows ArcGIS Desktop (Catalog , Map and Scene) to recognize a GPX file just like any other data source (shapefile, geodatabase, CAD file, etc), so you can view your GPS data in ArcCatalog/Map without doing anything more than connecting to your GPS device.

**Technical Details**

The GPX plug-in is a small, simple extension to ArcGIS. It is a single file (dll) that needs to be registered with ArcGIS by an administrator (registration program provided). Once the plug-in is registered, any GPX files available to your computer will appear in ArcCatalog. The waypoints, routes and tracks within the GPX file can be previewed in geographic, tabular or 3D (with 3D Analyst) modes. From ArcCatalog the GPX features can be dragged and dropped onto an ArcMap or ArcScene document. The WGS84 based GPX file will automatically re-project on the fly to match the projection/transformation in your map. While the GPX data is read-only (similar to CAD files), ArcMap allows you to export the GPX features to a shapefile or geodatabase for editing. This plug-in does not allow you to create GPX files, or send GPX files to a device.

**Screenshot**

**Key Features**

* View GPX data on your device directly in ArcGIS Desktop without copy or conversion
* Can replaces DNR Garmin in some workflows
* View all GPX attributes and use them to filter, symbolize, and label data
* If the GPX file contains elevations, 3D features are created
* Use ArcMap to easily export the GPX data to a shapefile or geodatabase

**Additional Information**

The GPX Plug-in and registration instructions can be obtained at

Contact Regan Sarwas ([Regan\_Sarwas@nps.gov](mailto:Regan_Sarwas@nps.gov)) for additional information on the GPX plug-in.