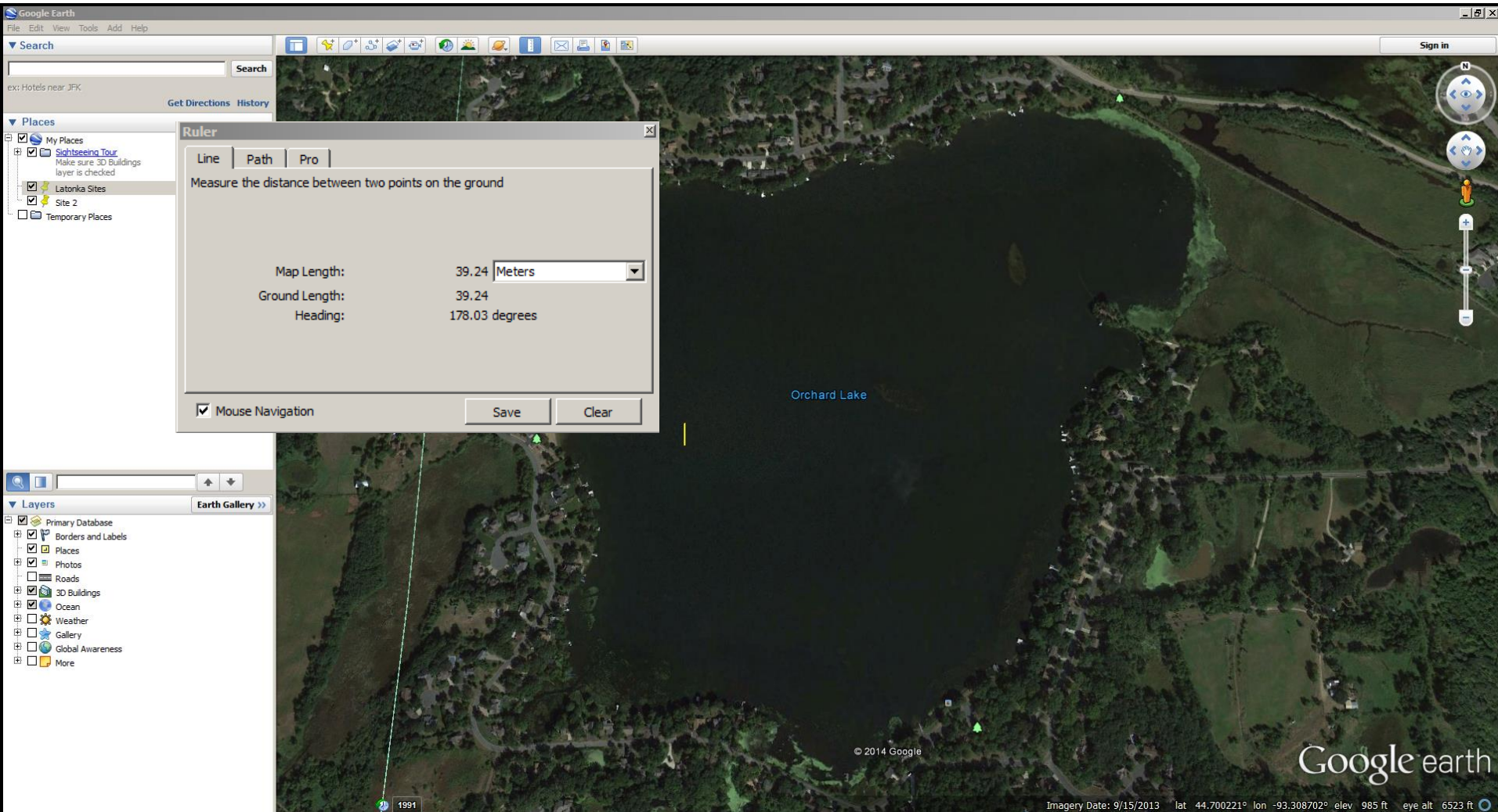




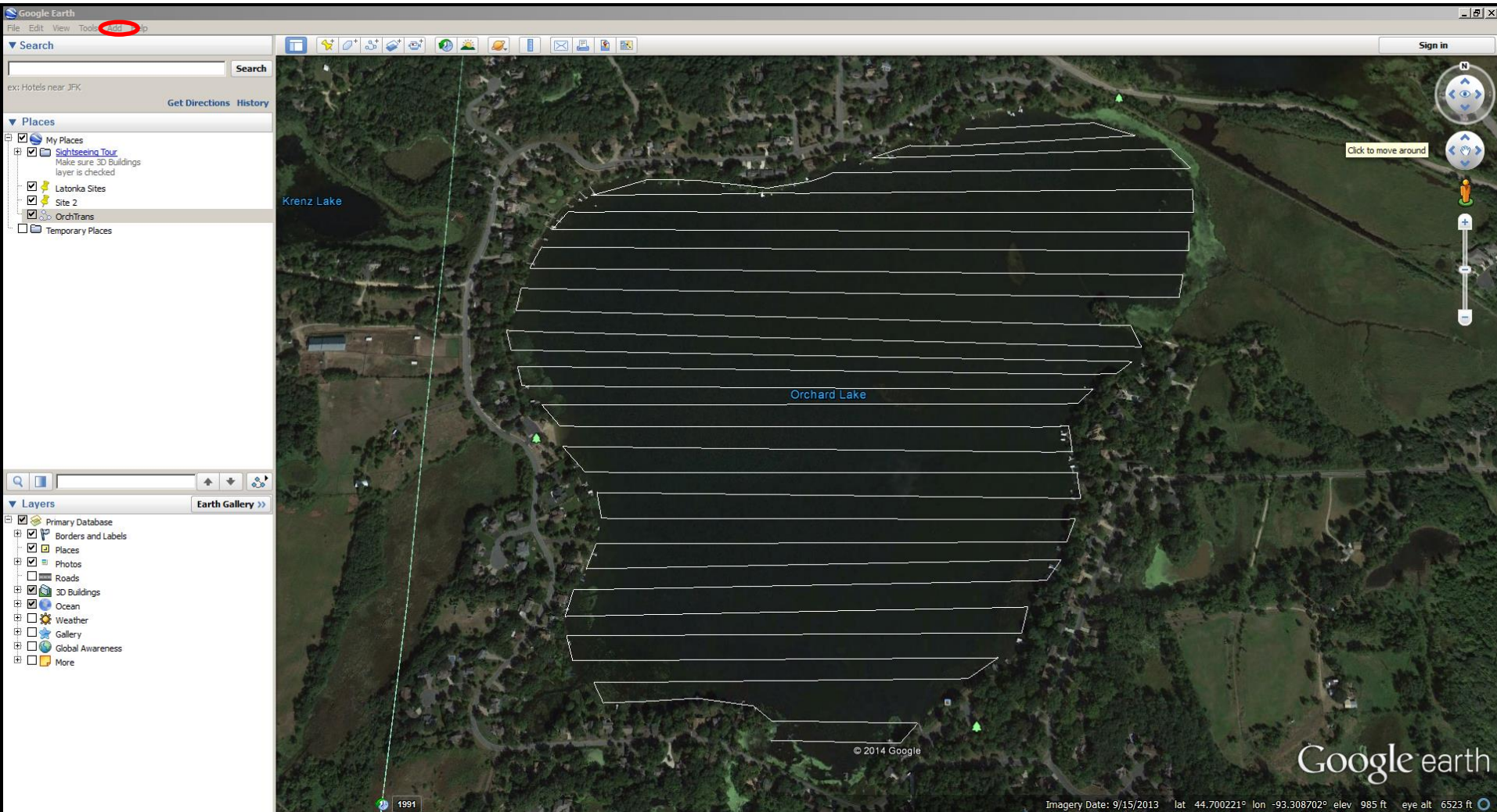
# BioBase Tutorial: Creating transects in Google Earth and transferring to .gpx for import into Lowrance

# Try Creating Transects with Google Earth or Google Earth Pro



Use measure tool to get visual for appropriate spacing

# Add a path











Right click on the path and Save As .kml (Keyhole Markup Language)

# Creating a .gpx file and importing into HDS

- MN DNR GPS Application Converts .shp to .gpx
- <http://www.dnr.state.mn.us/mis/gis/DNRGPS/DNRGPS.html>

## Download Program

- **\*\*UPDATED\*\* DNRGPS 6.1.0.6 RELEASES (6/2/2014)**
  - [DNRGPS for ArcMap 10.0 \(40MB\)](#)  ZIP
  - [DNRGPS for ArcMap 10.1 \(40MB\)](#)  ZIP
  - [DNRGPS for ArcMap 10.2 + \(40MB\)](#)  ZIP
  - Please note: some browser versions will prompt for a username and password when downloading DNRGPS. Use "ftp" or "anonymous" for both the username and password.
  - If you are not familiar with DNRGPS, it's recommended that you view the available help resources:
    - [DNRGPS Help](#)
    - [DNRGPS Recorded Webinar Training](#) 
  - If you have questions after viewing these resources, please send them to the [DNRGPS-users email list below](#).
  - If you are not an ArcMap user, any of the 3 downloads above will work for you.
  - Compatible with:
    - Windows XP, Windows 7, Windows 8, and Windows 10 (not tested with other operating systems)
    - ArcGIS 10.x, Google Earth, Most Garmin GPSs, and other NMEA output GPSs
  - LIMITED compatibility with:
    - ArcGIS 10.3 - DNRGPS interactions with ArcMap software (such as loading a layer from an active ArcMap document) will not work with ArcMap 10.3
    - As a workaround, use the File > Load From > File method to load an Esri Shapefile
  - NOT compatible with:
    - Mac operating system
    - ArcGIS 9.x - see old [DNRGarmin](#) page
  - Prerequisite: .NET 4 Framework - [download here](#) 
  - View [Known Issues](#)
  - [Report a bug or enhancement](#) 
  - View [Release Notes](#)
  - View [DNR No-Cost Software Distribution License Agreement](#)  TXT
- [DNRGPS 6.0.0.15](#)  ZIP (28MB)
  - Last modified 9/13/2012

# Open DNR GPS and “load from file” a .shp or .kml ; Save to a .gpx

The image shows a 'Load From File' dialog box in the foreground, overlaid on a software interface. The dialog box is open to the 'OrchardProj' folder and shows a file named 'TransClip.shp' (2 KB) with a date modified of 9/15/2014 2:32 PM. The file type is 'SHP File'. The file name field contains 'TransClip.shp' and the file type dropdown is set to 'ESRI Shapefile (2D) (\*.shp)'. The software interface in the background has a menu bar with 'Track', 'Route', 'Real Time', and 'Help'. Below the menu bar, there are tabs for 'Real-Time' and 'Real-Time'. A table of data is visible, with columns for 'ident', 'Latitude', 'Longitude', and 'y\_proj'. The table contains several rows of data, including track identifiers and coordinates. At the bottom of the software interface, the projection is set to 'NAD\_1983\_UTM\_Zone\_15N'.

	ident	Latitude	Longitude	y_proj		
	46960000	T1	44.7013583515365	-93.3031902640376	4949819.78	
	46960000	T1	44.7016815917323	-93.3167692667475	4949859.78	
	46960000	T1	44.7017182613734	-93.3032603718735	4949859.78	
	46960000	T1	44.7017191073973	-93.3029415918442	4949859.78	
	46960000	T1	44.7017192637876	-93.3028826275659	4949859.78	
	46960000	T1	44.7020413034136	-93.3169077801443	4949899.78	
	TRACK	23689.80346960000	T1	44.7020759167445	-93.3041781057277	4949899.78
-	TRACK	23689.80346960000	T1	44.7020774517204	-93.3036012312081	4949899.78
	TRACK	23689.80346960000	T1	44.7020808152577	-93.3023332981811	4949899.78
-	TRACK	23689.80346960000	T1	44.7024016215871	-93.3168276763423	4949939.78
	TRACK	23689.80346960000	T1	44.7024421176558	-93.3018772053318	4949939.78
-	TRACK	23689.80346960000	T1	44.7027620407189	-93.3167111401151	4949979.78
	TRACK	23689.80346960000	T1	44.702804093168	-93.3011652637456	4949979.78

# Save track to .gpx and transfer to a SD card to load into your Lowrance™.

The image shows a screenshot of the DNR GPS software interface. The 'Save To' menu is open, and the 'File...' option is selected. A 'Save To File' dialog box is open, showing the file 'Calhoun Transects.gpx' saved to a removable disk. The 'Save as type' is set to 'GPS Exchange Format (\*.gpx)'. In the background, a table of track data is visible.

	Longitude	y_proj	x_pr	
	-93.3127063973289	-1714416.66644304	-29	
	-93.3084000169286	-1712190.96791868	-29	
T1	44.9350046363324	-93.3133620425255	-1714770.69872514	-29
T1	44.9350202420929	-93.3076219420519	-1711803.97344062	-29
T1	44.9353627377546	-93.3140827520637	-1715158.36488132	-29
T1	44.9353823912555	-93.3068532557594	-1711421.82398685	-29
T1	44.9357206637464	-93.314865440212	-1715578.07081783	-29
T1	44.9357441514433	-93.3062277296387	-1711113.66026692	-29
T1	44.9360699027593	-93.3187737472107	-1717613.25748755	-29
T1	44.9360774435554	-93.3160606112363	-1716210.97557886	-29
T1	44.9360799012661	-93.3151712940784	-1715751.3312569	-29
T1	44.93610575965	-93.3056577056453	-1710834.1775338	-29
T1	44.9364285872027	-93.319273744515	-1717886.87969502	-29

# If the transects do not automatically load, import the file

