

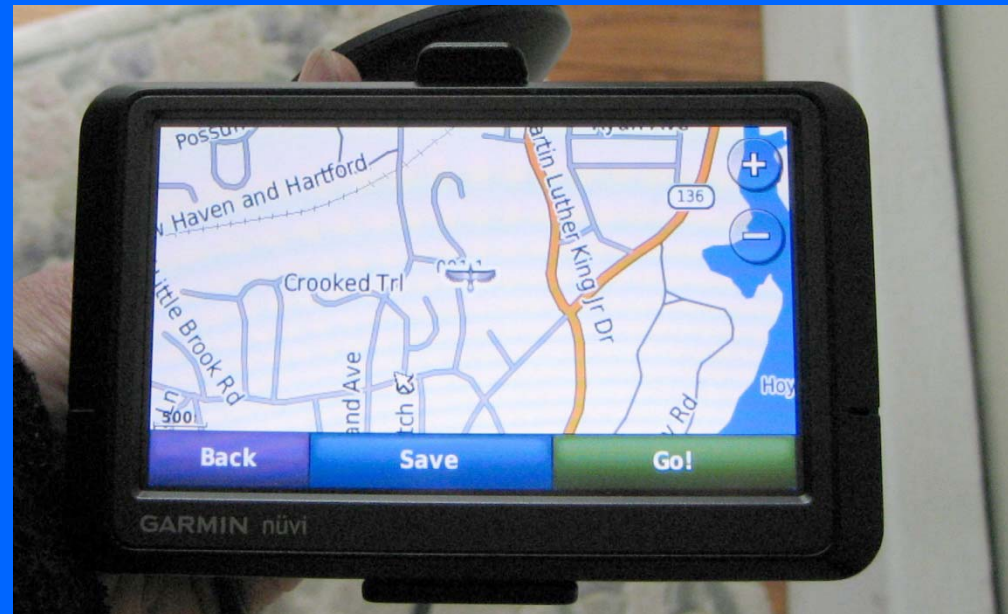
Spring NEARC
Hotlinking Photos to GPS Tracklog
Points
(on the cheap)

Peggy Minnis
Pace University
May 12, 2009

Garmin
Foretrex 201



Garmin eMap



Garmin nüvi



Set the time on the camera to agree with the GPS unit.



Get the camera's time-setting options open, then watch the GPS and set the minute just when the GPS turns over to the next minute.

_1674.JPG



_1679.JPG



_1685.JPG



_1692.JPG

IMG_1675.JPG



IMG_1680.JPG



IMG_1686.JPG



IMG_1695.JPG

IMG_1676.JPG



IMG_1681.JPG



IMG_1688.JPG



IMG_1696.JPG

IMG_1677.JPG



IMG_1683.JPG



IMG_1689.JPG



IMG_1697.JPG

IMG_1678.JPG



IMG_1684.JPG



IMG_1691.JPG



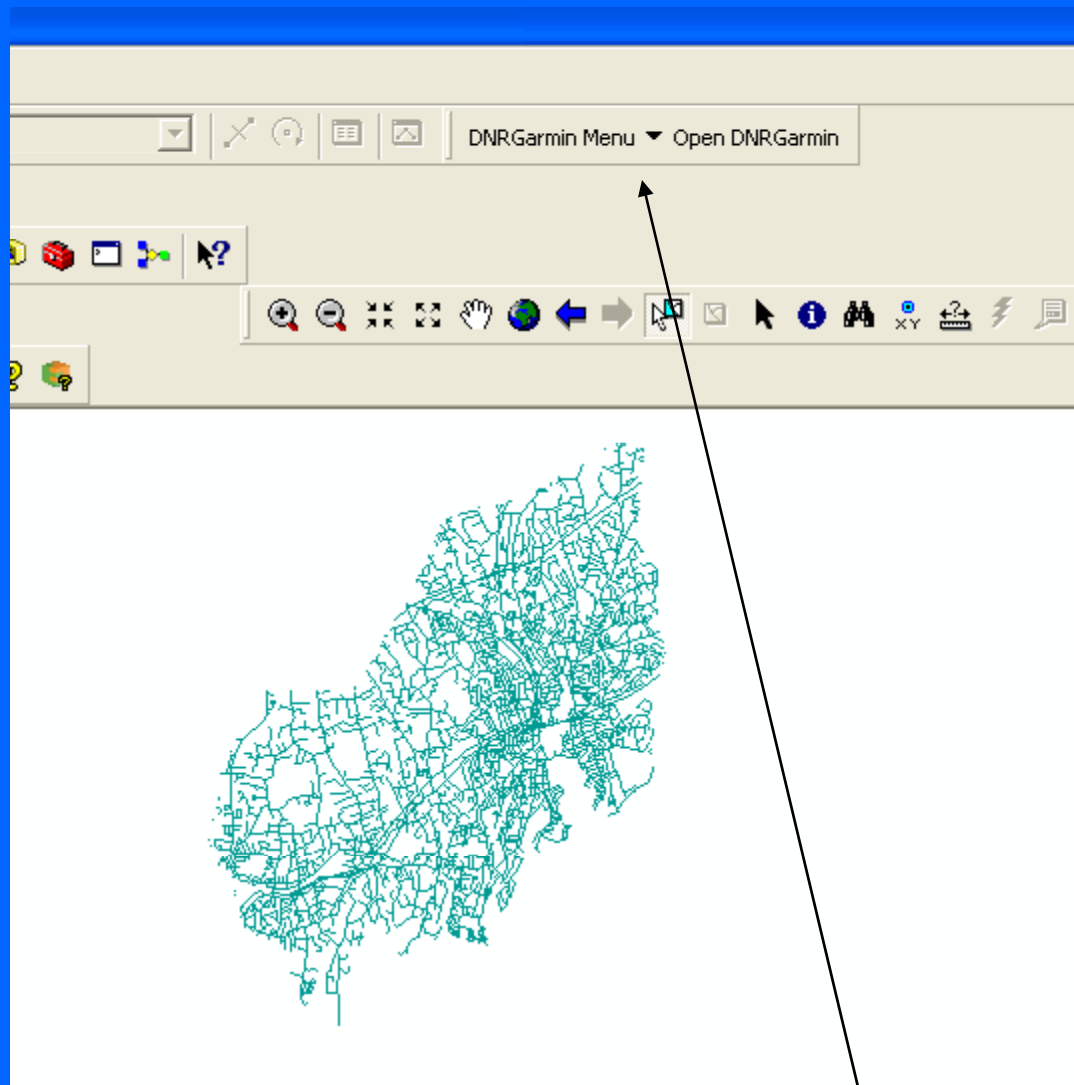
IMG_1698.JPG



Older Garmin GPS units connect via a serial port.



Newer units connect via USB, which Minnesota DNR allows.



DNR Plug-in for ArcMap



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Bureaus

- [Human Resources](#)
- [Information & Education](#)
- [Management & Budget Services](#)
- [Management Resources](#)
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DNR Garmin Application

DNR Garmin GPS Application

Current Version:

ArcView Extension: 5.4.0
VB Program: 5.4.1
ArcGIS Toolbar: 5.4.0
Build Date: 9/22/2008
Posted Date: 9/23/2008

Works With:

Arcview
Arcmap (9.x)
Google Earth
Landview
ArcExplorer 2.0 (non-java version)

Purpose of this Program

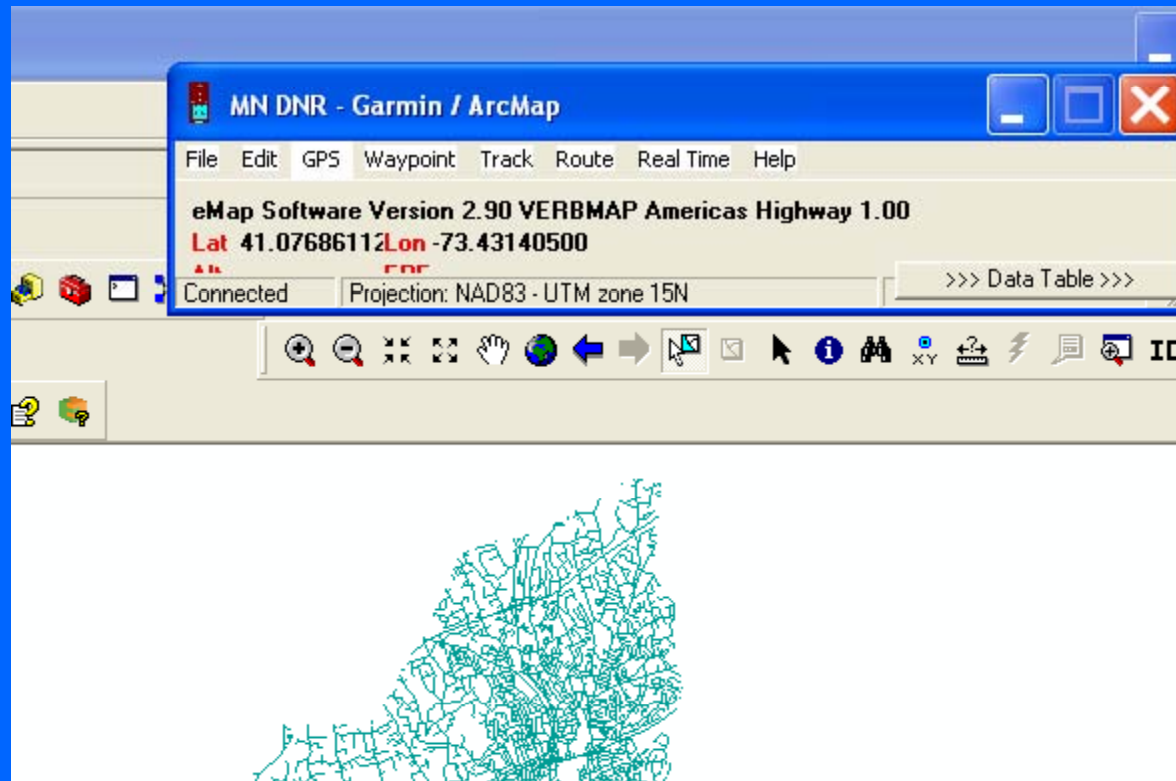
This extension was built to provide users the ability to directly transfer data between Garmin GPS handheld receivers and various GIS software packages. Using this program a user can use point features (graphics or shapefile) and upload them to the GPS as Waypoints. Line and Polygon Graphics or shapes can be uploaded to the GPS as Track Logs or Routes. Conversely, Waypoints, Track Logs, and Routes collected using the GPS can be transferred directly to ArcView/ArcMap/Google Earth/Landview and saved as Graphics or Shapefiles.

Functionality Highlights

At this time DNRGarmin contains (but is not limited to) the following functionality:

Download Waypoints/Tracks/Routes	Download waypoints, tracks, and routes from Garmin GPS and save as ArcView Shapefiles or Graphics
Upload Waypoints/Tracks/Routes	Upload waypoints, tracks, and routes to Garmin GPS
Real-Time Tracking	Collect real-time locational information and store as graphics or shapefile
Waypoint to Point	Converts Waypoints downloaded from the GPS unit into a point shapefile or graphics
Track to Point/Line/Polygon	Converts a Garmin Track log to an ArcView graphic or shapefile
Point to Waypoint	Convert Point shapes or graphics to a GPS Waypoint
Line/Polygon to Track	Converts a line or polygon to a Garmin Track
Point to Line/Polygon	Converts Point themes to Lines or Polygons
Add Documentation to Features	Adds basic documentation to ArcView themes including Name, GPS Model, Date, Agency, etc. - Arcview 3.x only
Calculate Shape Attributes	Calculates Area, Perimeter, Length attributes for features. Arcview 3.x/9.x
Calculate CEP	Determine Circular Error Probability rings for Error estimation. Arcview 3.x/9.x
Image Hotlinking	Create hotlinks between images and GPS data.
USB Connectivity	Speed up your downloads by a factor of about 10 with USB connectivity option!
Projection Engine	Built in Projection Functionality using Proj.4 Cartographic Projections Library http://www.remotesensing.org/proj/ by Gerald Evenden

GPS > Autoconnect. USB is one of the options, but it checks to see which serial port is connected.



Track > Download.

MN DNR - Garmin / ArcMap

File Edit GPS Waypoint Track Route Real Time Help

eMap Software Version 2.90 VERBMAP Americas Highway 1.00
 Lat 41.07686112 Lon -73.43140500
 Alt EPE

<<< Data Table >>>

Waypoint
 Track
 Route
 RTimeWpt

	type	ident	lat	long	y_proj
1	TRACK	ACTIVE LOG	41.12515211	-73.80774021	4734169.82844536
2	TRACK	ACTIVE LOG	41.12538815	-73.80823374	4734186.6488954
3	TRACK	ACTIVE LOG	41.12538815	-73.80814791	4734188.30897387
4	TRACK	ACTIVE LOG	41.12530231	-73.80797625	4734182.04065163
5	TRACK	ACTIVE LOG	41.12538815	-73.80801916	4734190.7992030
6	TRACK	ACTIVE LOG	41.12536669	-73.80793333	4734190.06217627
7	TRACK	ACTIVE LOG	41.12536669	-73.80780458	4734192.55243586
8	TRACK	ACTIVE LOG	41.12540960	-73.80780458	4734197.34557046
9	TRACK	ACTIVE LOG	41.12540960	-73.80782604	4734194.53448493
10	TRACK	ACTIVE LOG	41.12540960	-73.80782604	4734194.53448493
11	TRACK	ACTIVE LOG	41.12540960	-73.80784750	4734206.10280222
12	TRACK	ACTIVE LOG	41.12540960	-73.80793333	4734211.63407017
13	TRACK	ACTIVE LOG	41.12540960	-73.80797625	4734253.94656994
14	TRACK	ACTIVE LOG	41.12540960	-73.80799770	4734308.65991244
15	TRACK	ACTIVE LOG	41.12540960	-73.80782604	4734326.36173996
16	TRACK	ACTIVE LOG	41.12636832	-73.80780458	4734326.77681815
17	TRACK	ACTIVE LOG	41.12671852	-73.80761147	4734347.28957393
18	TRACK	ACTIVE LOG	41.12686872	-73.80767584	4734362.82212485
19	TRACK	ACTIVE LOG	41.12689018	-73.80769730	4734364.80416272
20	TRACK	ACTIVE LOG	41.12697601	-73.80778313	4734372.73139427
21	TRACK	ACTIVE LOG	41.12819910	-73.80759001	4734513.08785847
22	TRACK	ACTIVE LOG	41.12813473	-73.80767584	4734504.23749007
23	TRACK	ACTIVE LOG	41.12822056	-73.80769730	4734513.40974493
24	TRACK	ACTIVE LOG	41.12837076	-73.80801916	4734523.96188845
25	TRACK	ACTIVE LOG	41.12849951	-73.80831957	4734532.53301617
26	TRACK	ACTIVE LOG	41.12800598	-73.80844831	4734474.91499756
27	TRACK	ACTIVE LOG	41.12794161	-73.80868435	4734463.1594777
28	TRACK	ACTIVE LOG	41.12792015	-73.80872726	4734459.93243957
29	TRACK	ACTIVE LOG	41.12757683	-73.80868435	4734422.41300016
30	TRACK	ACTIVE LOG	41.12727642	-73.80872726	4734388.02680626
31	TRACK	ACTIVE LOG	41.12721205	-73.80859852	4734383.32654034

Connected 0 of 1459 Selected

DNRGarmin

Received 1459 records.

OK

It will download all the tracklog points from your GPS. This is a time to remember to clear out the old tracklogs one of these days.

It's time now to look at your tracklog of interest.

1139	TRACK	ACTIVE LOG	41.12571001	-73.80784750	4734230.07181641	2114680.48343306	false	False	255	97.711181640625	0	0	2009/04/27-18:35:41	eMap	2009/04/27 14:35:41
1140	TRACK	ACTIVE LOG	41.12543106	-73.80786896	4734198.4974671	2114685.806202	false	False	255	85.694580078125	0	0	2009/04/27-18:41:58	eMap	2009/04/27 14:41:58
1141	TRACK	ACTIVE LOG	41.12538815	-73.80784750	4734194.11940863	2114688.71640666	false	False	255	90.98193359375	0	0	2009/04/27-18:42:51	eMap	2009/04/27 14:42:51
1142	TRACK	ACTIVE LOG	41.07680798	-73.43141556	4736125.13514428	2147755.26348698	false	False	255	23.6895751953125	0	0	2009/05/06-18:29:04	eMap	2009/05/06 14:29:04
1143	TRACK	ACTIVE LOG	41.07687235	-73.43137264	4736133.17518489	2147757.21206837	false	False	255	15.9990234375	0	0	2009/05/06-18:29:20	eMap	2009/05/06 14:29:20
1144	TRACK	ACTIVE LOG	41.07695818	-73.43117952	4736146.57997635	2147771.29989558	false	False	255	62.6229248046875	0	0	2009/05/06-18:30:36	eMap	2009/05/06 14:30:36
1145	TRACK	ACTIVE LOG	41.07644320	-73.43171597	4736078.44327706	2147739.38575312	false	False	255	68.87158203125	0	0	2009/05/06-18:34:23	eMap	2009/05/06 14:34:23
1146	TRACK	ACTIVE LOG	41.07644320	-73.43214512	4736069.96641792	2147703.10081065	false	False	255	57.8165283203125	0	0	2009/05/06-18:36:11	eMap	2009/05/06 14:36:11
1147	TRACK	ACTIVE LOG	41.07665777	-73.43152285	4736106.23246217	2147750.1131346	false	False	255	57.8165283203125	0	0	2009/05/06-18:36:31	eMap	2009/05/06 14:36:31
1148	TRACK	ACTIVE LOG	41.07680798	-73.43180180	4736117.5057275	2147722.60681614	false	False	255	57.8165283203125	0	0	2009/05/06-18:37:01	eMap	2009/05/06 14:37:01
1149	TRACK	ACTIVE LOG	41.07655048	-73.43169451	4736090.85385771	2147738.39984364	false	False	255	54.932373046875	0	0	2009/05/06-18:38:16	eMap	2009/05/06 14:38:16
1150	TRACK	ACTIVE LOG	41.07590675	-73.43158722	4736021.04743171	2147764.27480847	false	False	255	48.203369140625	0	0	2009/05/06-18:38:47	eMap	2009/05/06 14:38:47
1151	TRACK	ACTIVE LOG	41.07491970	-73.43163013	4735909.91384779	2147786.41180898	false	False	255	43.3966064453125	0	0	2009/05/06-18:39:20	eMap	2009/05/06 14:39:20
1152	TRACK	ACTIVE LOG	41.07442617	-73.43195200	4735848.41241353	2147772.07873103	false	False	255	41.9547119140625	0	0	2009/05/06-18:39:38	eMap	2009/05/06 14:39:38
1153	TRACK	ACTIVE LOG	41.07427597	-73.43283176	4735814.25303843	2147701.61214182	false	False	255	40.993408203125	0	0	2009/05/06-18:40:02	eMap	2009/05/06 14:40:02
1154	TRACK	ACTIVE LOG	41.07406139	-73.43407631	4735765.69641027	2147601.98096662	false	False	255	38.109375	0	0	2009/05/06-18:40:37	eMap	2009/05/06 14:40:37
1155	TRACK	ACTIVE LOG	41.07380390	-73.43478441	4735722.94144034	2147548.82809842	false	False	255	36.186767578125	0	0	2009/05/06-18:41:06	eMap	2009/05/06 14:41:06
1156	TRACK	ACTIVE LOG	41.07307434	-73.43487024	4735639.73030603	2147560.61032555	false	False	255	34.744873046875	0	0	2009/05/06-18:41:34	eMap	2009/05/06 14:41:34
1157	TRACK	ACTIVE LOG	41.07217312	-73.43484879	4735539.45760574	2147585.94311754	false	False	255	33.783447265625	0	0	2009/05/06-18:42:03	eMap	2009/05/06 14:42:03
1158	TRACK	ACTIVE LOG	41.07176542	-73.43484879	4735493.90386571	2147596.5827103	false	False	255	33.3028564453125	0	0	2009/05/06-18:42:31	eMap	2009/05/06 14:42:31
1159	TRACK	ACTIVE LOG	41.07172251	-73.43480587	4735489.95701647	2147601.33171883	false	False	255	34.26416015625	0	0	2009/05/06-18:43:21	eMap	2009/05/06 14:43:21
1160	TRACK	ACTIVE LOG	41.07103586	-73.43484879	4735412.38749935	2147615.62156578	false	False	255	33.3028564453125	0	0	2009/05/06-18:43:46	eMap	2009/05/06 14:43:46
1161	TRACK	ACTIVE LOG	41.07024193	-73.43497753	4735321.1362206	2147625.45375048	false	False	255	36.186767578125	0	0	2009/05/06-18:44:10	eMap	2009/05/06 14:44:10
1162	TRACK	ACTIVE LOG	41.06893301	-73.43534231	4735167.68144875	2147638.76406705	false	False	255	36.66748046875	0	0	2009/05/06-18:44:43	eMap	2009/05/06 14:44:43

Click the first time/date (right column) above your area of interest and then Shift/Click the first entry in the table. Delete.

You are left with your times of interest and a firm resolve to clear out those old tracklogs.

This slide shows the inverse – the tracklog of interest is highlighted.

MN DNK - Garmin / ArcMap

File Edit GPS Waypoint Track Route RealTime Help
















eMap Software Version 2.90 VERBMAP Americas Highway 1.00
 Lat 41.0768611 Lon -73.43140500
 Alt 33 meters EPE 27.0

<<< Data Table >>>

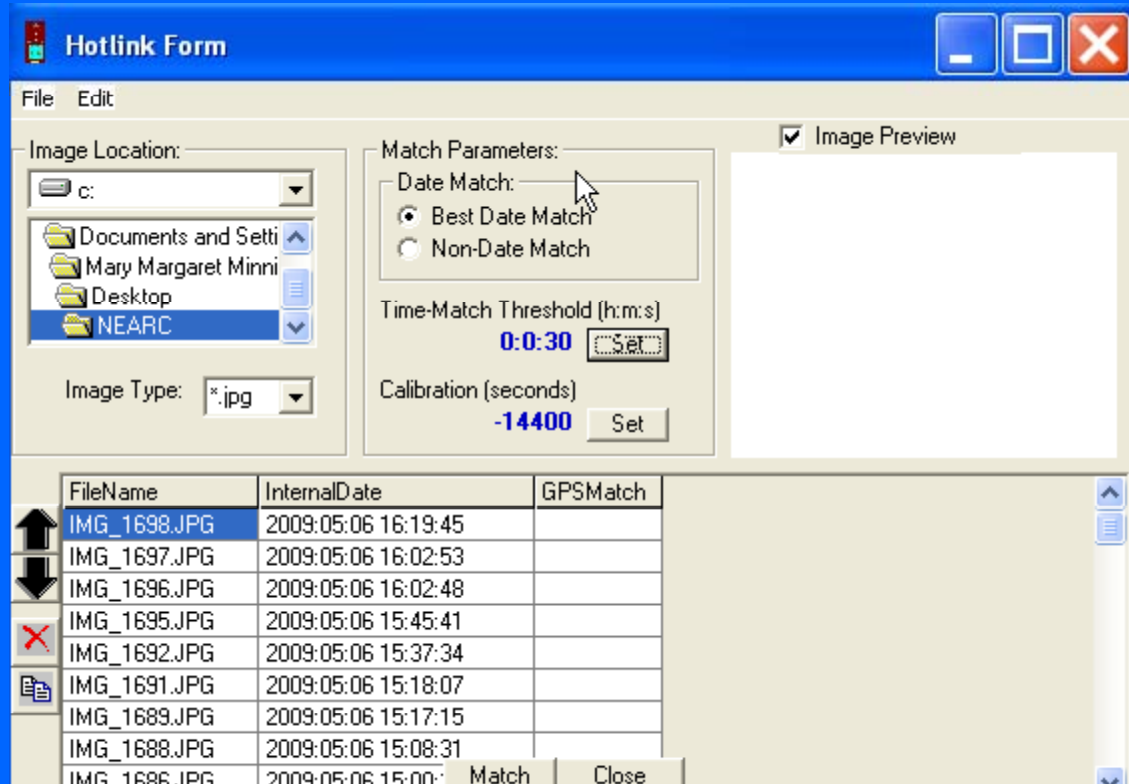
Waypoint Track Route RTime/wpt

	type	ident	lat	long	y_proj	x_proj	new_seg	display	color	altitude	depth	temp	time
1	TRACK	ACTIVE LOG	41.07680798	-73.43141556	4736125.13514428	2147755.26348698	true	False	255	23.6895751953125	0	0	2009/05/06-18:2
2	TRACK	ACTIVE LOG	41.07687235	-73.43137264	4736133.17518489	2147757.21206837	False	False	255	15.9990234375	0	0	2009/05/06-18:2
3	TRACK	ACTIVE LOG	41.07695818	-73.43117952	4736146.57997635	2147771.29985558	False	False	255	62.6229248046875	0	0	2009/05/06-18:3
4	TRACK	ACTIVE LOG	41.07644320	-73.43171597	4736078.44327706	2147739.38575312	True	False	255	68.87158203125	0	0	2009/05/06-18:3
5	TRACK	ACTIVE LOG	41.07644320	-73.43214512	4736069.96641792	2147703.10081065	True	False	255	57.8165283203125	0	0	2009/05/06-18:3
6	TRACK	ACTIVE LOG	41.07665777	-73.43152285	4736106.23246217	2147750.1131346	False	False	255	57.8165283203125	0	0	2009/05/06-18:3
7	TRACK	ACTIVE LOG	41.07680798	-73.43180180	4736117.5057275	2147722.60681614	False	False	255	57.8165283203125	0	0	2009/05/06-18:3
8	TRACK	ACTIVE LOG	41.07655048	-73.43169451	4736090.85385771	2147738.39984364	False	False	255	54.932373046875	0	0	2009/05/06-18:3
9	TRACK	ACTIVE LOG	41.07590675	-73.43158722	4736021.04743171	2147764.27480847	False	False	255	48.203369140625	0	0	2009/05/06-18:3
10	TRACK	ACTIVE LOG	41.07491970	-73.43163013	4735909.91384779	2147786.41160898	False	False	255	43.3966064453125	0	0	2009/05/06-18:3
11	TRACK	ACTIVE LOG	41.07442617	-73.43195200	4735848.41241353	2147772.07873103	False	False	255	41.9547119140625	0	0	2009/05/06-18:3
12	TRACK	ACTIVE LOG	41.07427597	-73.43283176	4735814.25303843	2147701.61214182	False	False	255	40.993408203125	0	0	2009/05/06-18:4
13	TRACK	ACTIVE LOG	41.07406139	-73.43407631	4735765.69641027	2147601.98096662	False	False	255	38.109375	0	0	2009/05/06-18:4
14	TRACK	ACTIVE LOG	41.07380390	-73.43478441	4735722.94144034	2147548.82809842	False	False	255	36.186767578125	0	0	2009/05/06-18:4
15	TRACK	ACTIVE LOG	41.07307434	-73.43487024	4735639.73030603	2147560.61032555	False	False	255	34.744873046875	0	0	2009/05/06-18:4
16	TRACK	ACTIVE LOG	41.07217312	-73.43484879	4735539.45760574	2147585.94311754	False	False	255	33.783447265625	0	0	2009/05/06-18:4
17	TRACK	ACTIVE LOG	41.07176542	-73.43484879	4735493.90386571	2147596.58271103	False	False	255	33.3028564453125	0	0	2009/05/06-18:4
18	TRACK	ACTIVE LOG	41.07172251	-73.43480587	4735489.95701648	2147601.33171883	False	False	255	34.26416015625	0	0	2009/05/06-18:4
19	TRACK	ACTIVE LOG	41.07103586	-73.43484879	4735412.38749935	2147615.62156578	False	False	255	33.3028564453125	0	0	2009/05/06-18:4
20	TRACK	ACTIVE LOG	41.07024193	-73.43497753	4735321.1362206	2147625.45375048	False	False	255	36.186767578125	0	0	2009/05/06-18:4
21	TRACK	ACTIVE LOG	41.06893301	-73.43534231	4735167.68144875	2147628.76406705	False	False	255	36.66748046875	0	0	2009/05/06-18:4
22	TRACK	ACTIVE LOG	41.06792450	-73.43575001	4735046.94503558	2147620.6040303	False	False	255	36.186767578125	0	0	2009/05/06-18:4
23	TRACK	ACTIVE LOG	41.06768847	-73.43585730	4735018.45363039	2147617.69004349	False	False	255	34.26416015625	0	0	2009/05/06-18:4
24	TRACK	ACTIVE LOG	41.06732368	-73.43566418	4734981.50777151	2147643.53949567	False	False	255	34.26416015625	0	0	2009/05/06-18:4
25	TRACK	ACTIVE LOG	41.06710911	-73.43575001	4734955.83794078	2147641.88016874	False	False	255	33.783447265625	0	0	2009/05/06-18:4
26	TRACK	ACTIVE LOG	41.06543541	-73.43637228	4734756.53938376	2147632.92813043	True	False	255	34.26416015625	0	0	2009/05/06-18:4
27	TRACK	ACTIVE LOG	41.06560707	-73.43637228	4734775.71377415	2147628.44328835	False	False	255	36.186767578125	0	0	2009/05/06-18:4
28	TRACK	ACTIVE LOG	41.06554270	-73.43635082	4734768.95118247	2147631.94358559	False	False	255	33.3028564453125	0	0	2009/05/06-18:4
29	TRACK	ACTIVE LOG	41.06545687	-73.43641520	4734758.08966468	2147628.73861464	False	False	255	30.4188232421875	0	0	2009/05/06-18:4
30	TRACK	ACTIVE LOG	41.06539249	-73.43643665	4734750.47260363	2147628.60444148	False	False	255	29.9381103515625	0	0	2009/05/06-18:4

This is what is left – only your times and tracklog points of interest.

Name ▲	Size	Type	Date Modified	Date Picture Taken	Dimensions
 IMG_1679	958 KB	JPEG Image	5/6/2009 2:46 PM	5/6/2009 2:46 PM	2592 x 1944
 IMG_1680	867 KB	JPEG Image	5/6/2009 2:48 PM	5/6/2009 2:48 PM	2592 x 1944
 IMG_1681	690 KB	JPEG Image	5/6/2009 2:51 PM	5/6/2009 2:51 PM	2592 x 1944
 IMG_1683	871 KB	JPEG Image	5/6/2009 2:58 PM	5/6/2009 2:58 PM	2592 x 1944
 IMG_1684	741 KB	JPEG Image	5/6/2009 2:58 PM	5/6/2009 2:58 PM	2592 x 1944
 IMG_1685	692 KB	JPEG Image	5/6/2009 2:59 PM	5/6/2009 2:59 PM	2592 x 1944
 IMG_1686	354 KB	JPEG Image	5/6/2009 3:00 PM	5/6/2009 3:00 PM	2592 x 1944
 IMG_1688	602 KB	JPEG Image	5/6/2009 3:08 PM	5/6/2009 3:08 PM	2592 x 1944
 IMG_1689	351 KB	JPEG Image	5/6/2009 3:17 PM	5/6/2009 3:17 PM	2592 x 1944
 IMG_1691	996 KB	JPEG Image	5/6/2009 3:18 PM	5/6/2009 3:18 PM	2592 x 1944
 IMG_1692	567 KB	JPEG Image	5/6/2009 3:37 PM	5/6/2009 3:37 PM	2592 x 1944
 IMG_1695	1,082 KB	JPEG Image	5/6/2009 3:45 PM	5/6/2009 3:45 PM	2592 x 1944
 IMG_1696	782 KB	JPEG Image	5/6/2009 4:02 PM	5/6/2009 4:02 PM	2592 x 1944
 IMG_1697	726 KB	JPEG Image	5/6/2009 4:02 PM	5/6/2009 4:02 PM	2592 x 1944
 IMG_1698	882 KB	JPEG Image	5/6/2009 4:19 PM	5/6/2009 4:19 PM	2592 x 1944

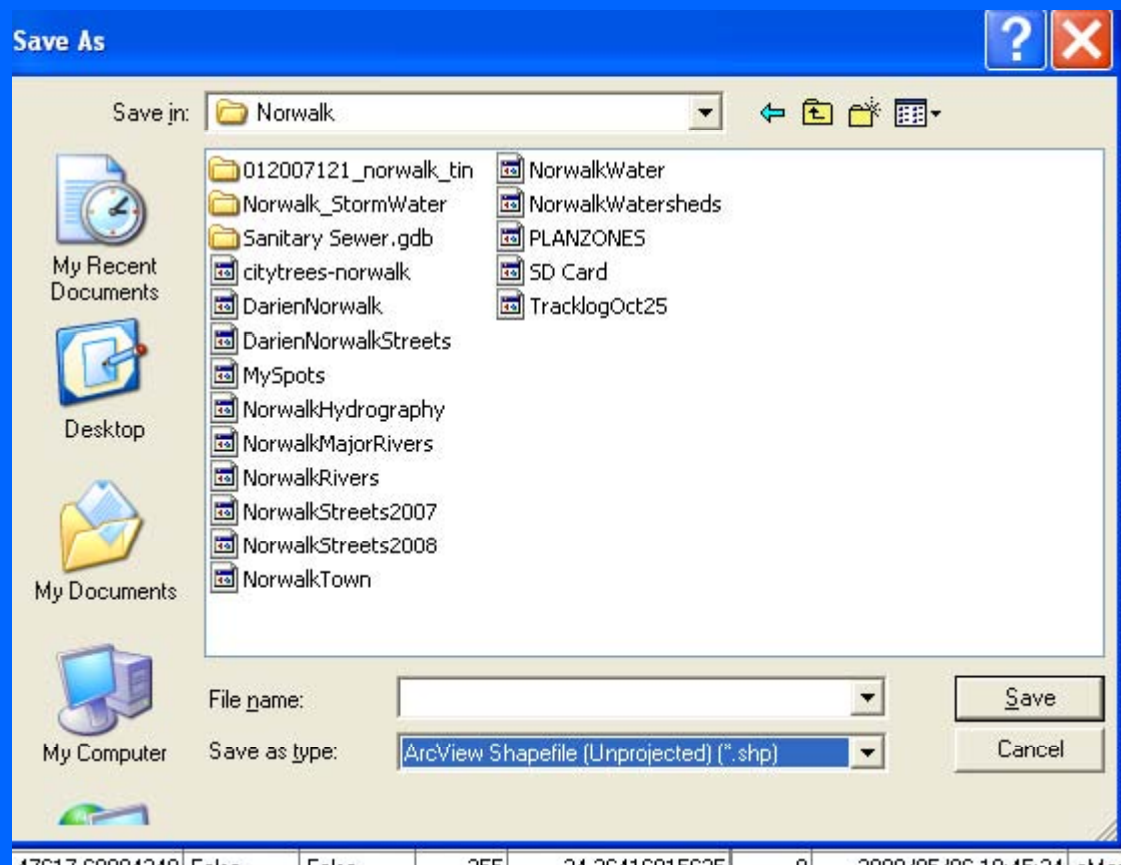
This is the contents of the folder where the photos were taken during a bike ride in Rowayton/Darien on May 6, 2009.



This is where you find your photo folder, set the time-match threshold and calibrate to GMT in seconds. For this, it is -14,400 seconds. Then, click “match” on the bottom

seg	display	color	altitude	temp	time	model	filename	ltime
se	False	255	5.424560546875	0	2009/05/06-18:57:30	eMap		2009/05/06 14:57:30
se	False	255	4.94384765625	0	2009/05/06-18:57:37	eMap	C:\Documents and Se	2009/05/06 14:57:37
se	False	255	4.4632568359375	0	2009/05/06-18:58:00	eMap	C:\Documents and Se	2009/05/06 14:58:00
se	False	255	3.982666015625	0	2009/05/06-18:58:18	eMap	C:\Documents and Se	2009/05/06 14:58:18
se	False	255	6.3858642578125	0	2009/05/06-18:58:34	eMap	C:\Documents and Se	2009/05/06 14:58:34
se	False	255	7.34716796875	0	2009/05/06-18:58:58	eMap	C:\Documents and Se	2009/05/06 14:58:58
se	False	255	8.30859375	0	2009/05/06-18:59:14	eMap	C:\Documents and Se	2009/05/06 14:59:14
se	False	255	6.3858642578125	0	2009/05/06-18:59:32	eMap	C:\Documents and Se	2009/05/06 14:59:32
se	False	255	4.94384765625	0	2009/05/06-18:59:50	eMap	C:\Documents and Se	2009/05/06 14:59:50
se	False	255	3.501953125	0	2009/05/06-19:00:19	eMap	C:\Documents and Se	2009/05/06 15:00:19
se	False	255	3.982666015625	0	2009/05/06-19:00:40	eMap	C:\Documents and Se	2009/05/06 15:00:40
se	False	255	4.4632568359375	0	2009/05/06-19:00:45	eMap	C:\Documents and Se	2009/05/06 15:00:45
se	False	255	2.5406494140625	0	2009/05/06-19:00:49	eMap	C:\Documents and Se	2009/05/06 15:00:49
se	False	255	3.982666015625	0	2009/05/06-19:01:06	eMap	C:\Documents and Se	2009/05/06 15:01:06
se	False	255	4.4632568359375	0	2009/05/06-19:01:11	eMap	C:\Documents and Se	2009/05/06 15:01:11
se	False	255	7.34716796875	0	2009/05/06-19:01:31	eMap		2009/05/06 15:01:31
se	False	255	6.3858642578125	0	2009/05/06-19:01:56	eMap		2009/05/06 15:01:56
se	False	255	8.7891845703125	0	2009/05/06-19:02:14	eMap		2009/05/06 15:02:14
se	False	255	14.076416015625	0	2009/05/06-19:02:51	eMap		2009/05/06 15:02:51
se	False	255	11.1925048828125	0	2009/05/06-19:03:09	eMap		2009/05/06 15:03:09
se	False	255	6.3858642578125	0	2009/05/06-19:03:28	eMap		2009/05/06 15:03:28
se	False	255	7.34716796875	0	2009/05/06-19:03:50	eMap		2009/05/06 15:03:50
se	False	255	9.2698974609375	0	2009/05/06-19:04:10	eMap		2009/05/06 15:04:10
se	False	255	7.34716796875	0	2009/05/06-19:04:33	eMap		2009/05/06 15:04:33
se	False	255	7.34716796875	0	2009/05/06-19:04:47	eMap		2009/05/06 15:04:47
se	False	255	7.34716796875	0	2009/05/06-19:04:49	eMap		2009/05/06 15:04:49
se	False	255	7.34716796875	0	2009/05/06-19:04:53	eMap		2009/05/06 15:04:53
se	False	255	2.5406494140625	0	2009/05/06-19:05:08	eMap		2009/05/06 15:05:08
se	False	255	-0.3433837890625	0	2009/05/06-19:05:29	eMap		2009/05/06 15:05:29
se	False	255	2.06005859375	0	2009/05/06-19:05:46	eMap		2009/05/06 15:05:46

In the Tracklog file, a column is created and the locations of the pictures that match the time are inserted. If the times are overlapping, you could have the photo associated with more than one tracklog.



File> Save to> ArcView Shapefile (unprojected) *.shp

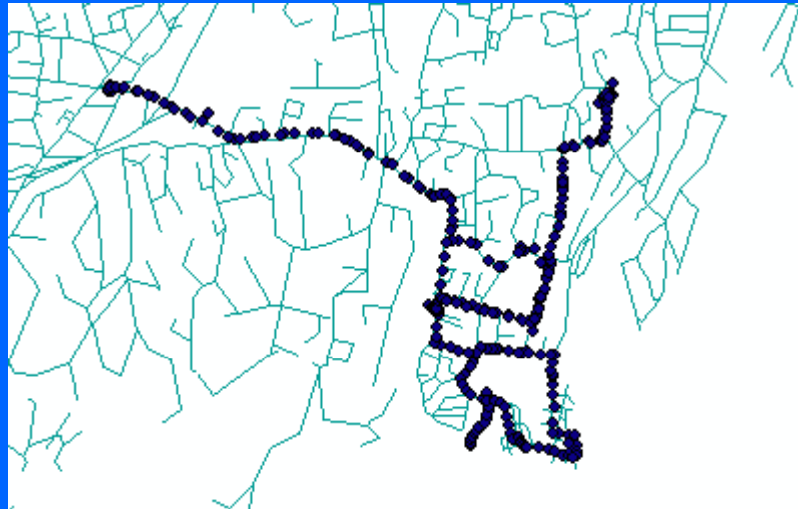
255	57.8165283203125	0	2009/05/06-18:38
255	57.8165283203125	0	2009/05/06-18:38
255	57.8165283203125	0	2009/05/06-18:38
			2009/05/06-18:38
			2009/05/06-18:38
			2009/05/06-18:38
			2009/05/06-18:40
			2009/05/06-18:40
			2009/05/06-18:40
			2009/05/06-18:40
			2009/05/06-18:40
255	33.783447265625	0	2009/05/06-18:40
255	33.3028564453125	0	2009/05/06-18:40
255	33.3028564453125	0	2009/05/06-18:40

Output Shape [X]

Please Define the Output Shape

Point
 Line
 Polygon

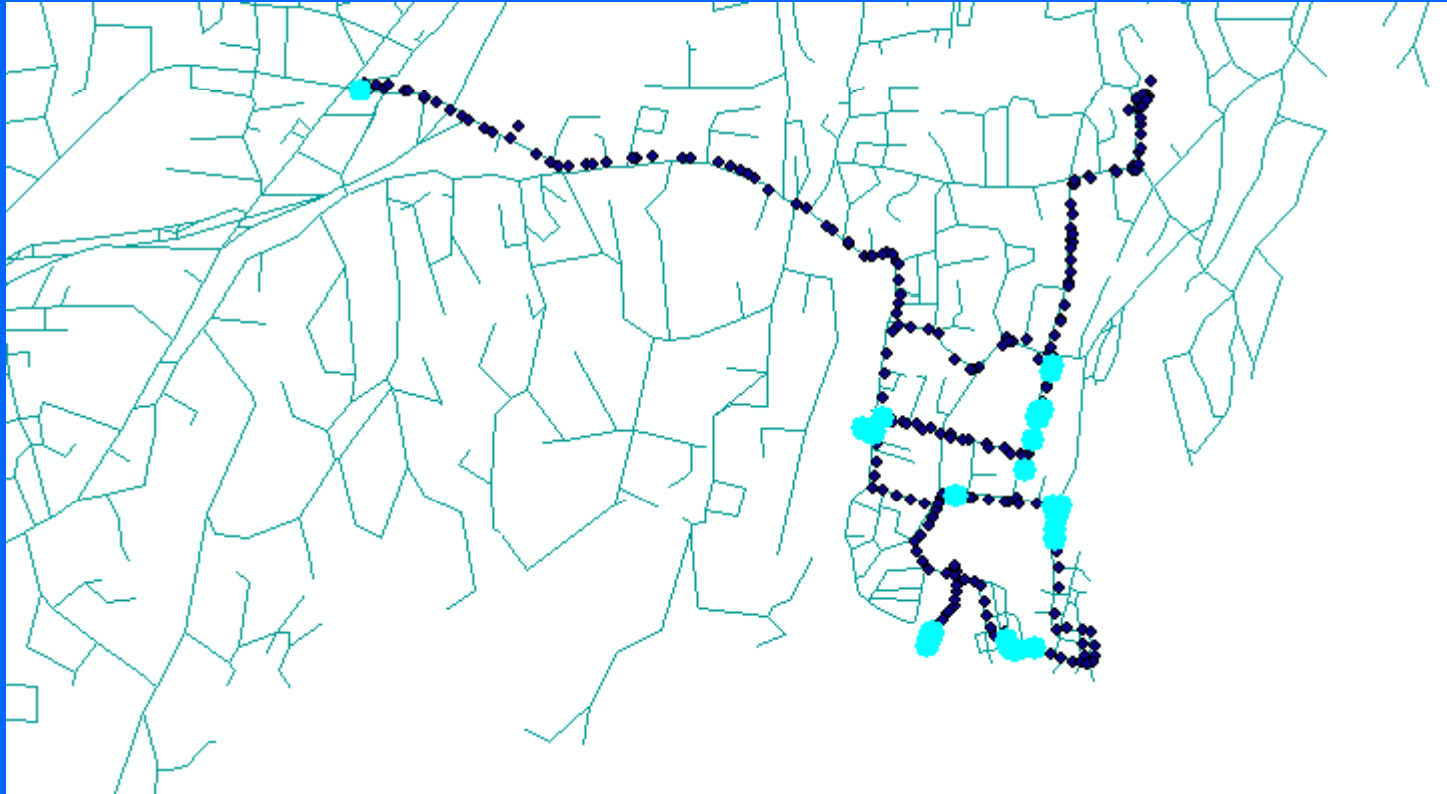
OK



Add the May 6 tracklog to the Map.

ALTITUDE	DEPTH	TEMP	TIME	MODEL	FILENAME
25.61	0	0	2009/05/06-20:32:43	eMap	
26.09	0	0	2009/05/06-20:33:09	eMap	
25.61	0	0	2009/05/06-20:33:34	eMap	
27.05	0	0	2009/05/06-20:33:49	eMap	
33.78	0	0	2009/05/06-20:34:05	eMap	
21.28	0	0	2009/05/06-20:34:52	eMap	
8.78	0	0	2009/05/06-20:35:40	eMap	
8.78	0	0	2009/05/06-20:35:55	eMap	
8.78	0	0	2009/05/06-20:36:17	eMap	
9.26	0	0	2009/05/06-20:36:36	eMap	
9.26	0	0	2009/05/09-12:39:35	eMap	
47.24	0	0	2009/05/09-12:47:04	eMap	
34.26	0	0	2009/05/06-18:45:41	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1679.JPG
33.78	0	0	2009/05/06-18:45:56	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1679.JPG
34.26	0	0	2009/05/06-18:47:29	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
36.18	0	0	2009/05/06-18:47:45	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
33.3	0	0	2009/05/06-18:48:00	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
30.41	0	0	2009/05/06-18:48:17	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
29.93	0	0	2009/05/06-18:48:22	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
25.13	0	0	2009/05/06-18:48:41	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
23.68	0	0	2009/05/06-18:49:00	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1680.JPG
12.63	0	0	2009/05/06-18:50:19	eMap	C:\Documents and Settings\Mary Margaret Minnis\Desktop\NEARC\IMG_1681.JPG

Open the Attribute table for May 6 bike ride and double click the filename to get all the photos grouped together. Select all in that section that have entries in the filename column.



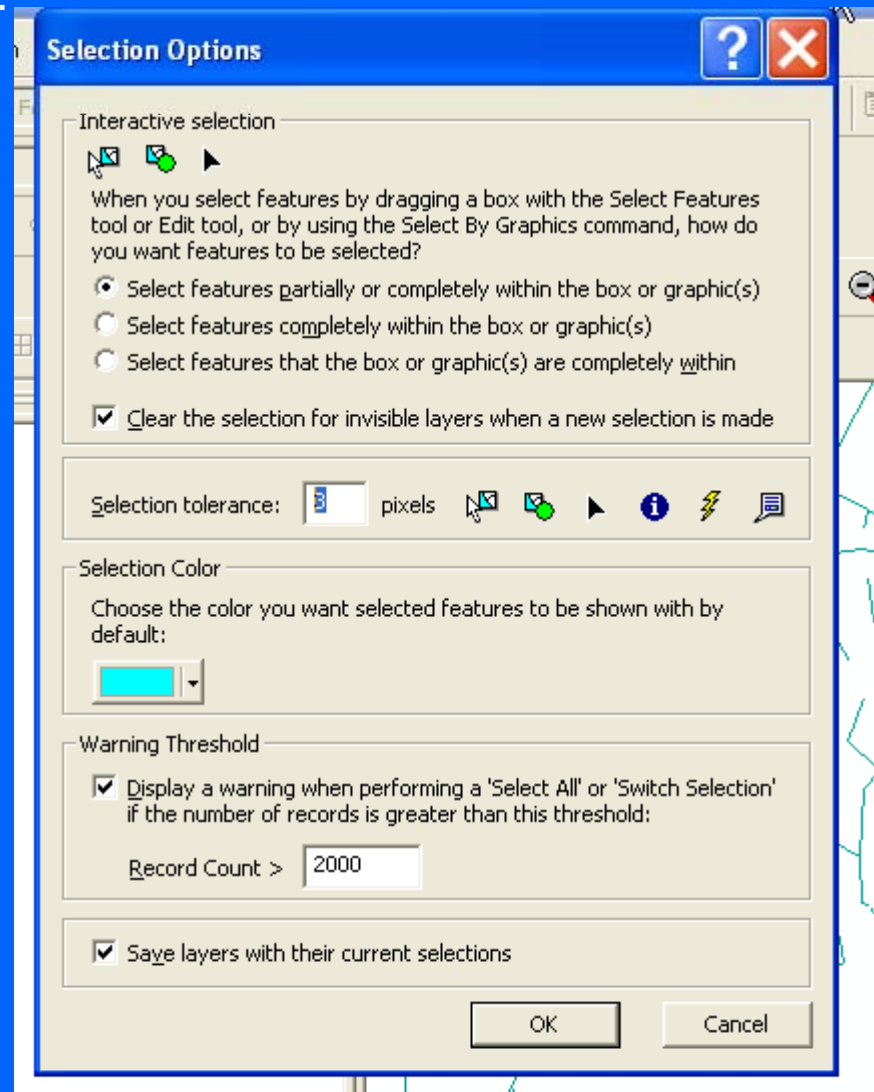
The tracklog points that have photos for them will be highlighted. Right click Bike ride>Export data

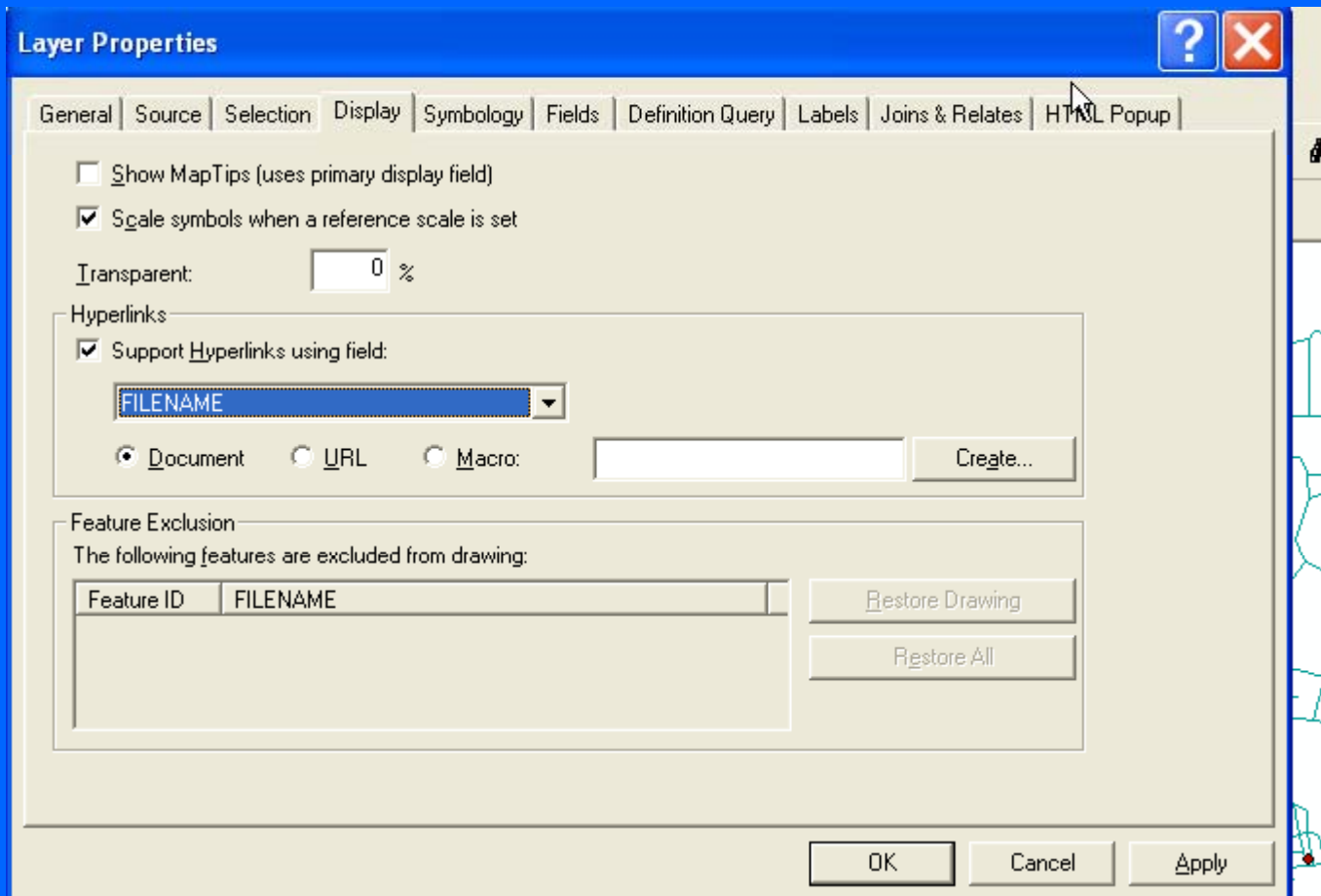


The locations with the hyperlinked photos are now a new shapefile.

Open the attribute table and delete points that refer to the same image. Close the editor and save.

Increase the number of pixels for the selection tolerance. I chose 10 pixels.





38.JPG

Page Help

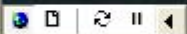


Computer Management Data Sources (ODBC)

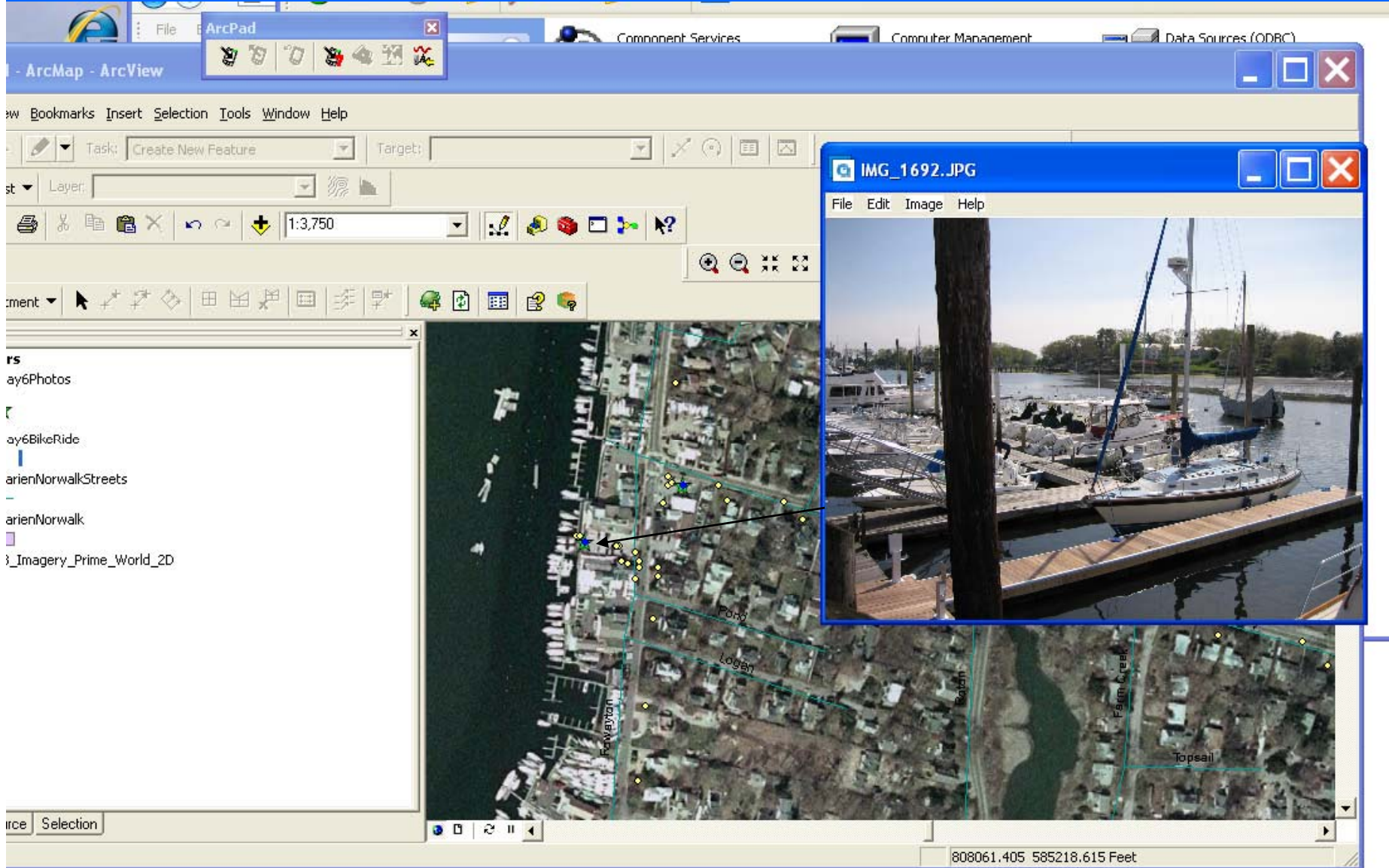
DNRGarmin Menu Open DNRGarmin

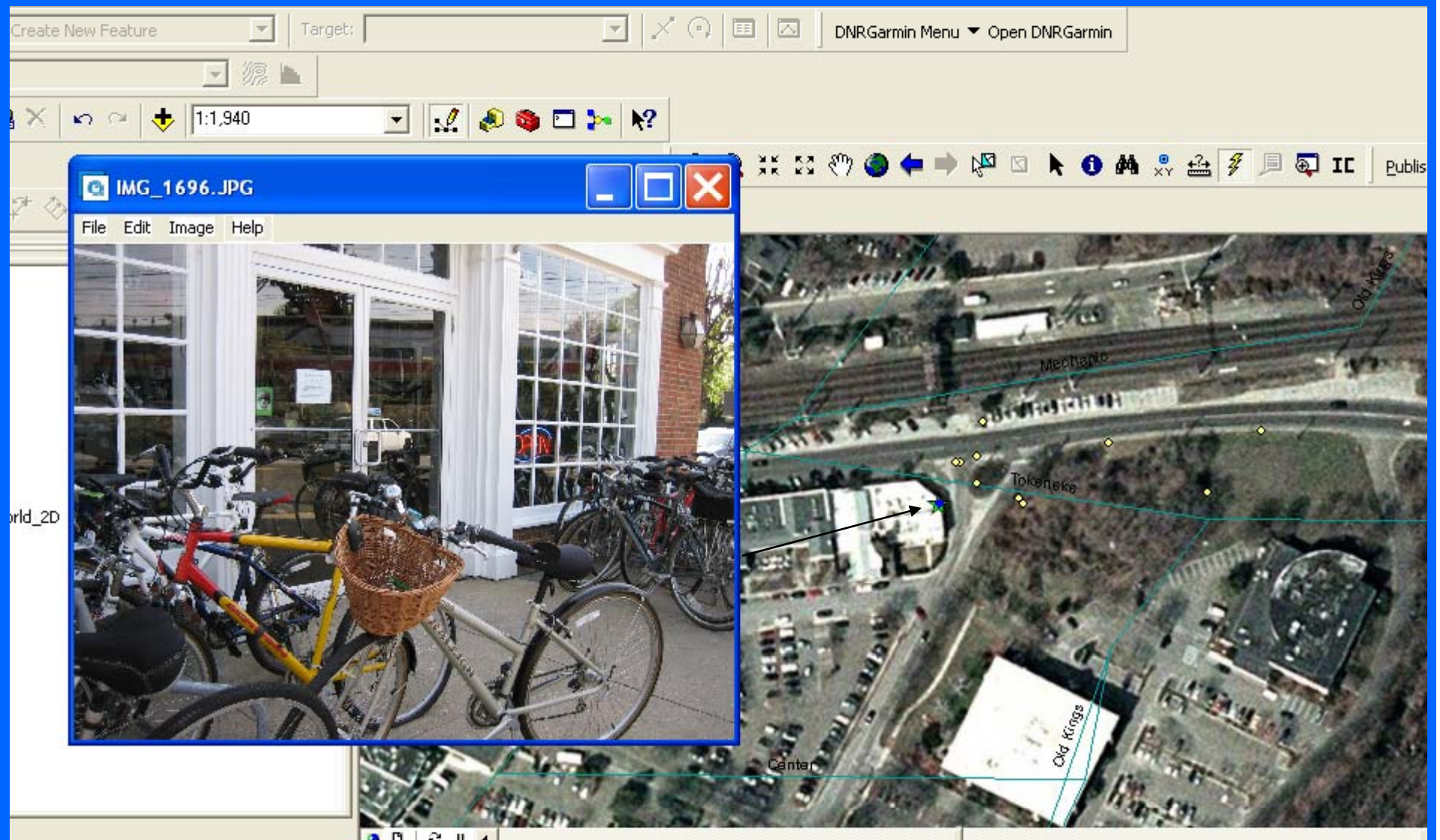


on



810940.962 582703.641 Feet





Notice the wicker basket (good for carrying GPS and camera)

Contact:

Peggy Minnis MMinnis@pace.edu