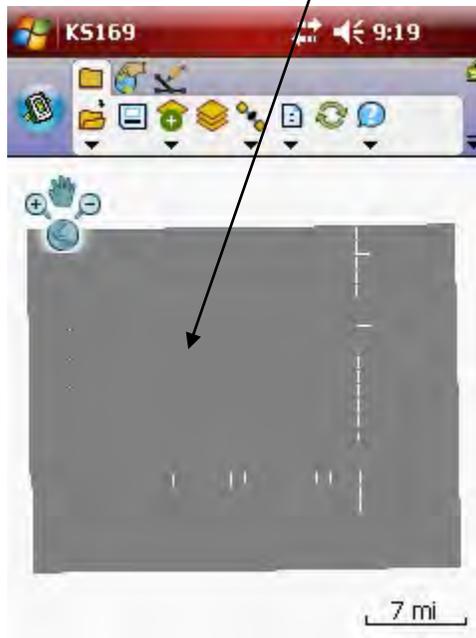


June 28, 2011

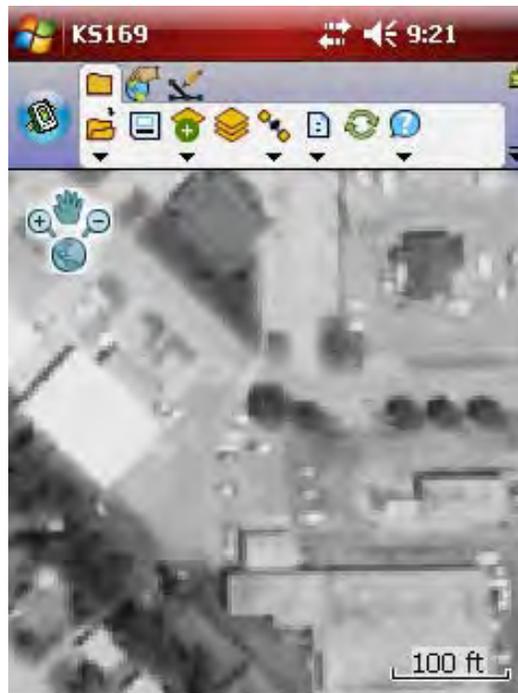
1. Start an ArcPad project such as KS169.apm. Your screen should look like the example below.



2. Use the **Zoom** tool to zoom into an area where you want to GPS a polygon.



Zoomed-in area example:



4. Click on the drop-down arrow on the **Satellite** icon and click on **GPS Active** to activate GPS receiver.

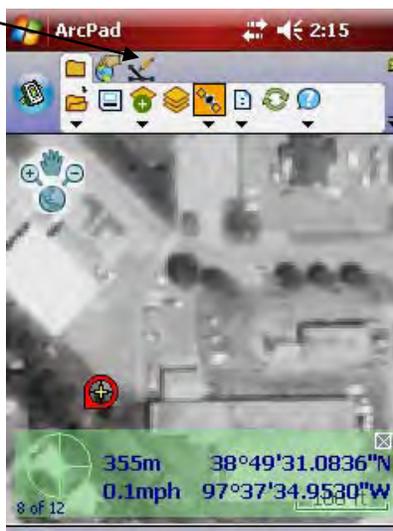


5. Your screen should now show a red circle with a yellow cross-hair inside it and this is the GPS Locator and it represents your location. It might take a few minutes for the GPS unit to start receiving satellite signals.

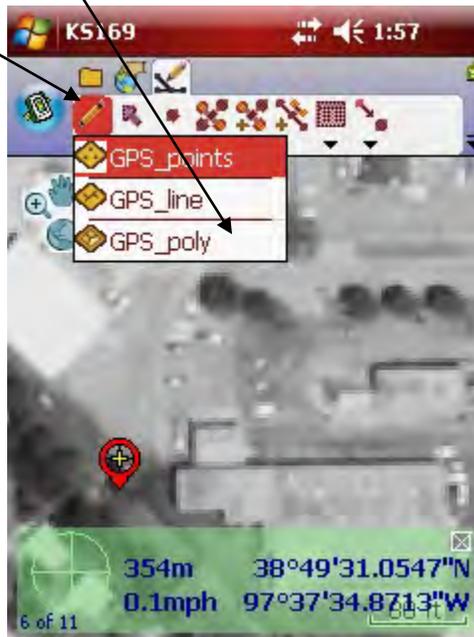


The green box at the bottom of the screen is the GPS status bar and it will display your latitude, longitude, altitude in meters (multiply the meters by 3.2808 to get feet), speed over ground (if you are moving) and it will alternate displaying the number of satellites it is using and the Positional Dilution of Precision (PDOP).

6. Click on the **Edit** icon to switch to edit mode.



7. Click on the **Pencil** and then **GPS_poly** to set the receiver to GPS a polygon.

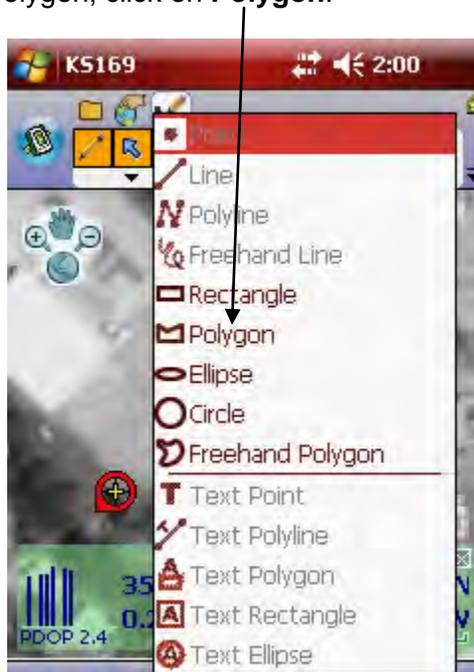


8. Click on the drop-down arrow on the **Capture** icon.



Take note that the **Pencil** icon is highlighted. This indicates the GPS is in edit mode and ready to capture GPS signals. If it is not highlighted you will not be able to GPS a polygon.

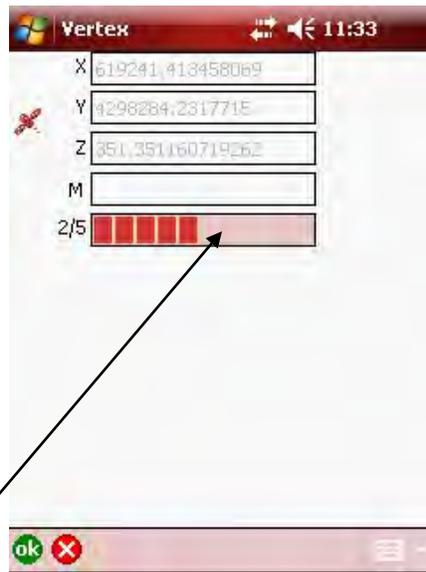
9. Since we want to GPS a polygon, click on **Polygon**.



10. From this point there are two ways we can capture a polygon. One is to capture points for the polygon one at a time. Click on **Add a Single Vertex** icon.

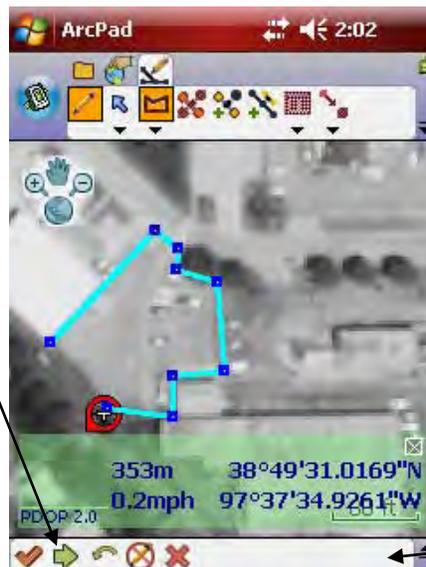


This will capture your beginning point of the polygon and bring up the following screen.



Take note of the bottom box. This box is displaying the number of GPS signals the GPS unit is collecting and it must show "5/5" before you move on to your next point. It will automatically close when it has captured five signals.

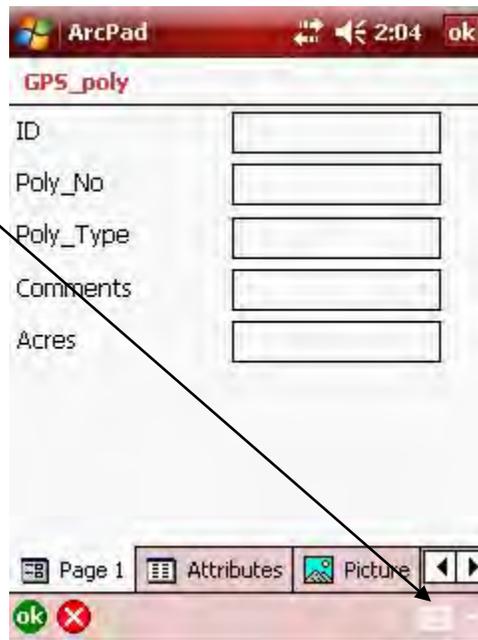
11. After you have collected the beginning point, move to the second point in the polygon you want to capture and click on the **Add a Single Vertex** icon to capture your second point. Keep repeating this process until you almost come back to the starting point of the polygon. Then click on the **Proceed** button on the **Command Toolbar** to save your polygon.



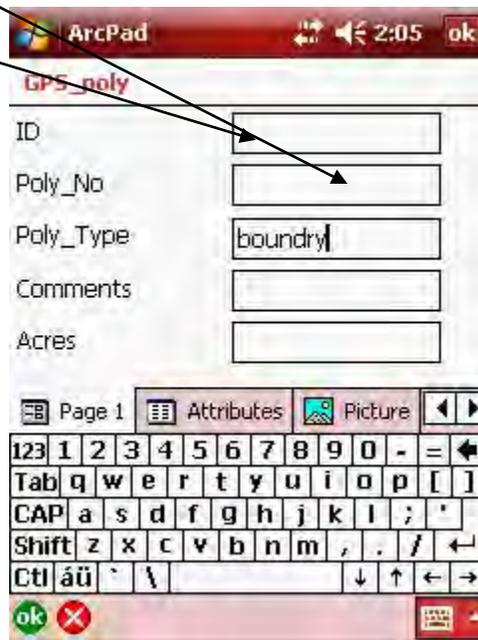
Command Toolbar

Since we do not want to over shoot the polygon, we are going to stop a few feet short of the beginning point. Once you click on the **Proceed** button, ArcPad will complete the polygon.

12. This will bring up the **Attribute** window. This is the window where you can put in descriptions of the polygon you just collected. In order to input comments, click on the **Keyboard** icon.

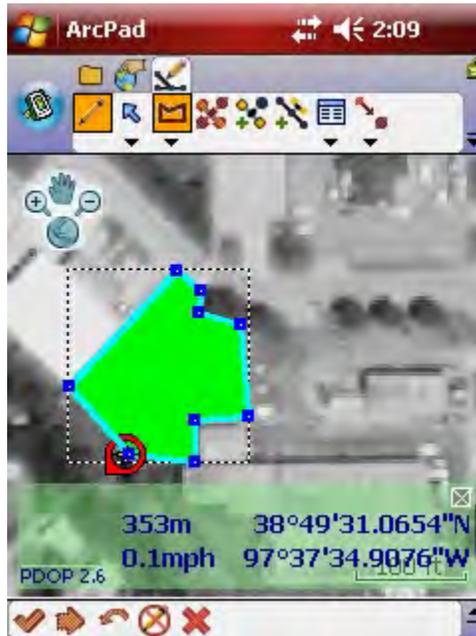


13. This will bring up a tiny keyboard that allows you to add comments within the text boxes. The **ID** field and the **Poly_No** field only accepts numbers.



Once you are finished, click the **OK** button.

14. The polygon you just collected should now display on your screen and it should be highlighted in blue.



15. The other option in capturing a polygon is to click on the **Add Vertices Continuously** icon.

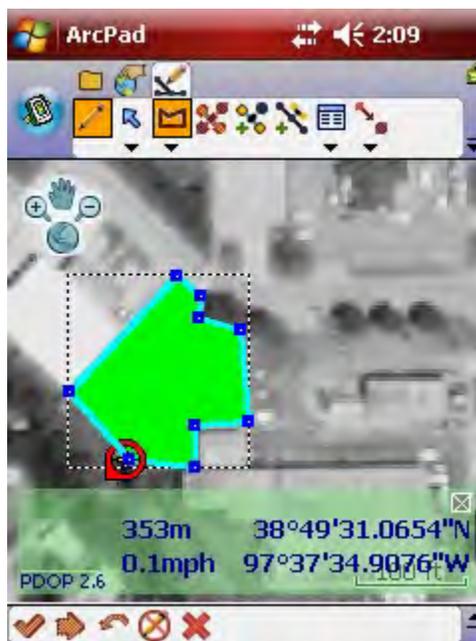


Once you have clicked on the icon, start walking your polygon. Your GPS unit will be continuously collecting a point every one meter.

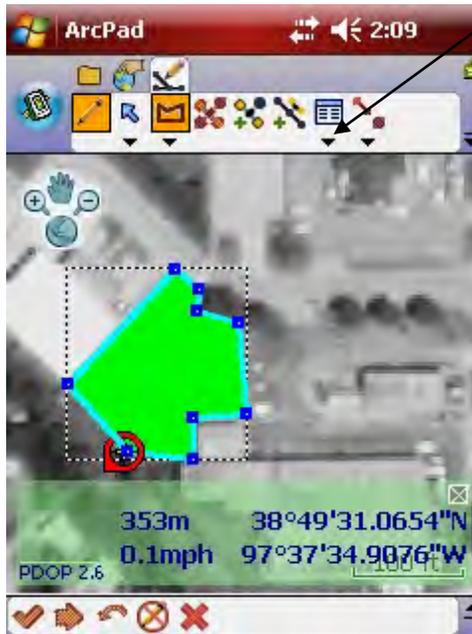
Once you have finished, click on the **Proceed** button on the **Command Toolbar** to save your Polygon. Be sure to stop a few feet short of your beginning point.



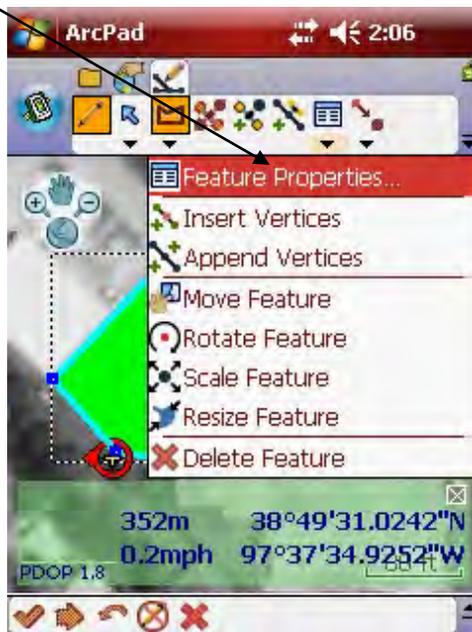
This will bring up the **Attribute** window just like it did in capturing one point at a time. Follow those same steps in saving your polygon. After you have saved your attributes, you should have a polygon on your screen as in the example below.



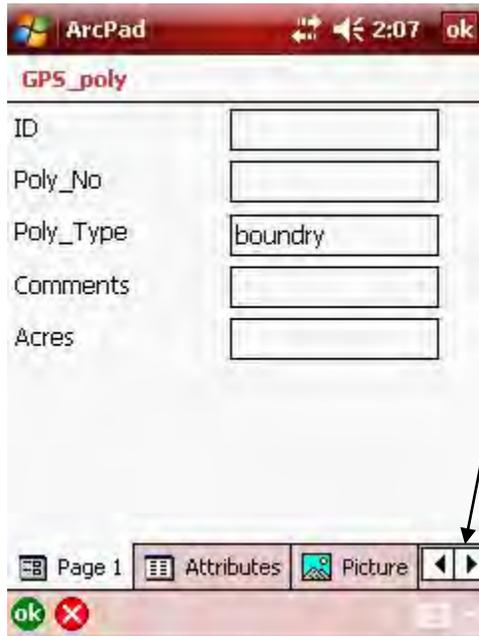
17. Now that we have captured a polygon, we can look at the area of that polygon. The polygon should still be selected, so click on the drop-down arrow of the **Show Feature Properties** icon.



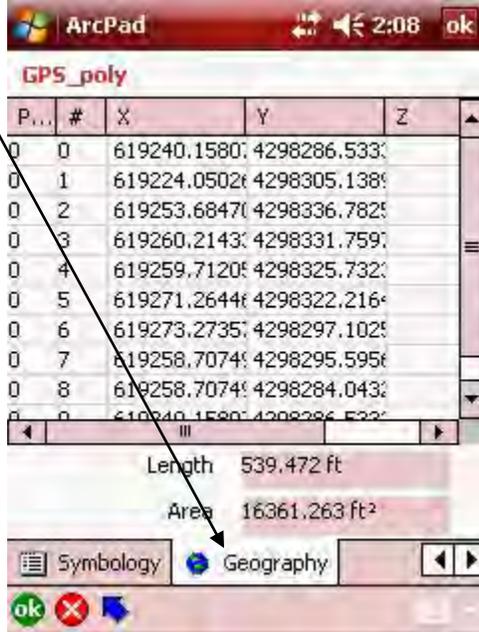
18. Next, click on **Feature Properties**.



19. This will bring up the **Feature Properties** window. Click on the **right-arrow** unit you get to the **Geography** tab.



20. Click on the **Geography** tab.



21. This will bring up a window that will display the feature properties of the polygon. This window shows the northing and easting of each GPS point that you captured and also the total length and area of the polygon. Once you are finished looking at the properties, click on the **OK** button.

Easting Northing

P...	#	X	Y	Z
0	0	619240.1580	4298286.533	
0	1	619224.0502	4298305.138	
0	2	619253.6847	4298336.782	
0	3	619260.2143	4298331.759	
0	4	619259.7120	4298325.732	
0	5	619271.2644	4298322.216	
0	6	619273.2735	4298297.102	
0	7	619258.7074	4298295.595	
0	8	619258.7074	4298284.043	
0	9	619240.1580	4298286.533	

Altitude (should be blank)

Length 539.472 ft Length

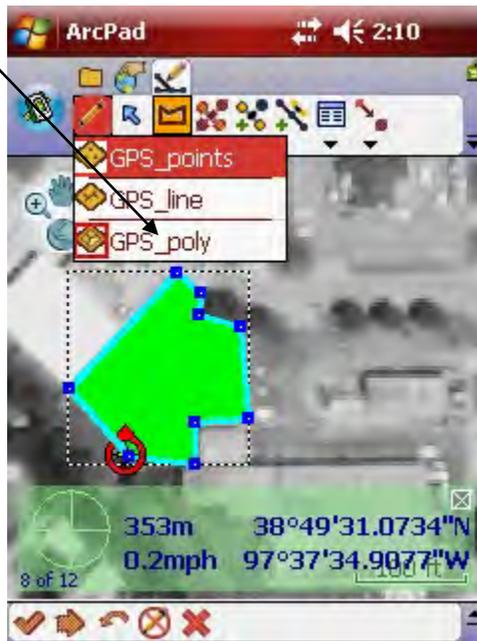
Area 16361.263 ft² Area (divide by 43560 to get acres)

OK → ok

22. Now you can go on to GPS another polygon or you can exit from the edit mode. To exit, click the **Pencil** icon.

353m 38°49'31.0654"N
0.1mph 97°37'34.9076"W
PDOP 2.6

23. Then click on **GPS_poly** to exit edit mode.



24. You should now be out of edit mode, but the GPS receiver is still active as shown in the screen below. If you are finished, inactivate the receiver and exit ArcPad. To inactivate the receiver, click on the **Folders** icon.

Pencil icon

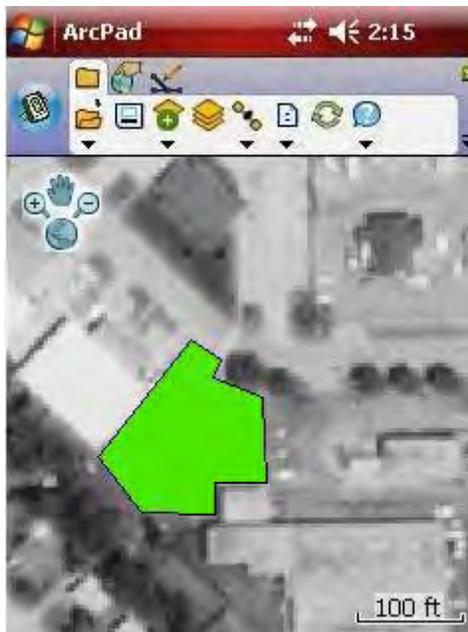


Take note of the **Pencil** icon. It is no longer highlighted. This means you are out of edit mode.

25. Then click on the **Satellite** icon.



26. The receiver is now inactive and the GPS locator and GPS status bar are no longer on the screen as shown in the example below.



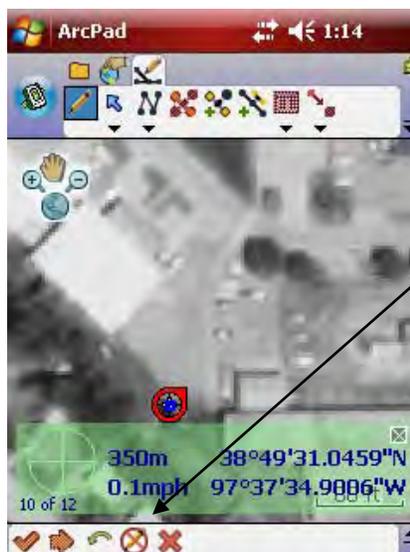
27. You can now exit out of ArcPad.

Comments Section

One thing to be aware of while capturing a polygon is do not touch the screen with the stylus in the highlighted area below because it will add a point where you touched it. Your area of interest will be different.



If you do touch the screen, click on the **Undo** button and it will remove the point or click on the **Cancel Feature Edits** button to completely get rid of the point (or polygon). One way to avoid adding points with the stylus is to inactivate it. To do this, click on the **Toggle Pen for Capture** button.



This will highlight the **Toggle Pen for Capture** button and the stylus will be inactive in the highlighted area described above.

