# After a Day of Survey and Site Recording: Downloading Data



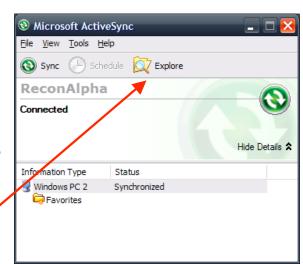
1. **Turn on the computer**. The screen should look something like this. The tools for downloading are on the right side of the screen. Those on the left are for uploading. Leave them till later. As ArcGIS takes a while to load it is good to start the process of loading the map first. Double-click the first shortcut:



2. While ArcGIS is loading connect the Recon or Nomad (handheld device) to the Dell with the USB cable. The ActiveSync screen as shown on the right should pop up.

Some of the devices run out of batteries quickly so if you find this screen doesn't come up, then you may need to have the device plugged into a charger while you upload/download.

3. On the ActiveSync window, **click on 'Explore'** to open the files on the Recon/Nomad.



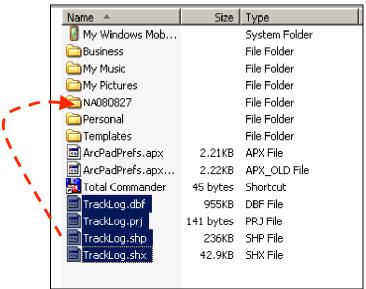
4. Cut and paste the day's tracklog files into the day's folder on each handheld device

For both Nomads and Recons the tracklog files are stored in the 'My Documents' folder of the device. This is usually what is opened when you click 'Explore' so should be immediately visible.

There are four tracklog files. Highlight all of these (use the ctrl button to select multiple files at once).

### For Nomads Only:

Using you mouse drag the four tracklog files into the day's folder. It should look something like 'NA090524' (what it would be called for Nomad A on the 24/5/2009). This will cut and paste the tracklog files into this folder.



#### For Recons Only:

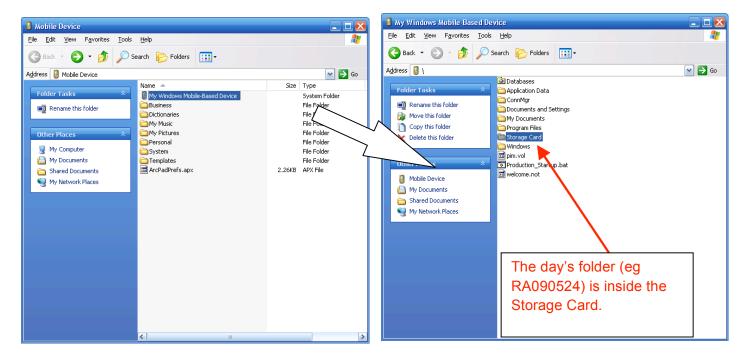
You also need to send the tracklog files to the day's folder. This is located in a different place to Nomads.

Double-click 'My Window's Mobile-Based Device'.

Double-click the 'Storage Card' folder

Then double click the day's folder (Something like 'RA090525').

Paste the tracklog files into the day's folder [Ctrl V].



## 5. Create a folder in the Daily Backup

Double click '2. Daily Backup' on the computer desktop.

Within this folder create a folder for the day. Name it after the date in reverse format. So for the 25/5/2009 use 090525.



#### 6. Cut and Paste the data from the handheld device.

Highlight the day's folder on the recon or nomad (eg 'RA090525'). Then **CUT** [Ctrl X]. Go to the Daily Backup folder you just created (eg 090525), open it and then **PASTE** [Ctrl V] the data from the device.

WAIT while the files transfer.

### 7. Follow steps 3 to 6 for each Nomad or Recon device

You will not need to do step 5 (Creating a daily backup folder for the day) as you need to use the one you have already created for the first nomad/recon.

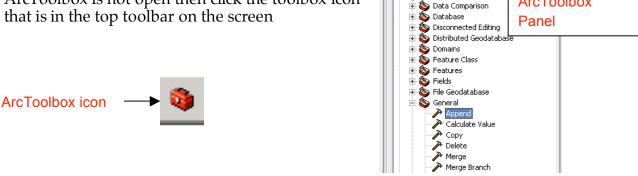
At the end of this process you should have a daily backup folder (eg 090524) with a file in it for each nomad/recon.

### 8. Update the MasterTracklog\_2009 File.

Now begins the process of appending the day's data into the ArcGIS database. Go to the ArcGIS ODX map (you should have loaded it already as this was the

first step).

On the left hand side of the ArcGIS screen there should be two panels. One lists all the layers that are visible and the other is the ArcToolbox. If ArcToolbox is not open then click the toolbox icon that is in the top toolbar on the screen



Now in the ArcToolbox Panel click 'Data Management Tools', 'General' and then 'Append'.

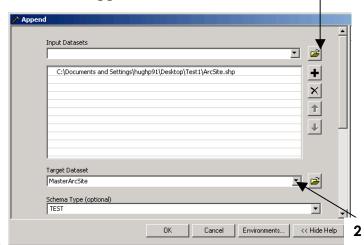
A box should pop up once you have clicked 'Append' as seen below:

Click the small yellow folder [1]. Navigate to the daily backup folder and the day's folder where you placed the data.

C:/Daily\_Backup\_2009/090524

Or whatever the day is...

Open the top folder corresponding with a Recon or Nomad. Select 'tracklog.shp' and click ok.



ArcToolbox 3D Analyst Tools
Analysis Tools

🕀 🚳 Cartography Tools

🐞 Data Interoperability Tools 🚵 Data Management Tools

**ArcToolbox** 

Conversion Tools

Now systematically add the tracklog.shp file for each of the nomads and recons. They will be listed in the rectangular box after you have added them.

Once all of the tracklog.shp files have been added to the list. Select 'MasterTracklog\_2009' in the drop-down menu under 'Target Dataset' using the small downward arrow [2].

Click OK.

### Wait....

Another small box should appear. It will disappear on its own accord once the data has been successfully appended.

Now check to see that the tracklog has appeared on the ArcGIS in the right location. If all is ok then continue on to append to MasterArcSite\_2009

### MasterTracklog Troubleshooting...

If there is no tracklog for where you have surveyed then it is possible that you have re-added the data from the day before. To check this, go through the process of re-appending and when you click the yellow folder [1] if the folder from yesterday pops up, this has been the mistake you have made. Re-append the right set of data if this happens and don't worry about the double up from the day before.

### 9. Update the Masterarcsite\_2009 file

This is a similar process to updating the Mastertracklog. Again select 'Append' from the ArcToolbox.

Again click the yellow folder [1]. Navigate to the day's backup folder (you probably just have to go up one level as you were using it before for the tracklog). Now systematically add each arcsite.shp file.

Click the down-arrow under 'Target Dataset' and select Masterarcsite\_2009.

Click OK... Wait....

### Masterarcsite Troubleshooting...

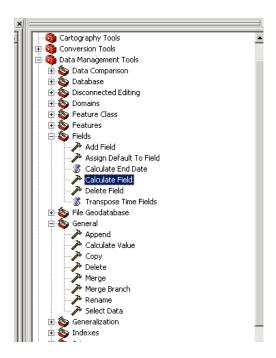
It is very important that you do not accidentally create multiple entries of site data. Check after you have appended that there are now new sites in the location you just surveyed. If you something wrong has happened then track down either Angela or Richard to fix this. Do not attempt to delete or edit any data.

# 10. Assign each new site a 2009 ODX number.

First make sure there are no sites selected in the database. Click the button 'Clear Selected Features' which is in the top toolbar of ArcGIS.



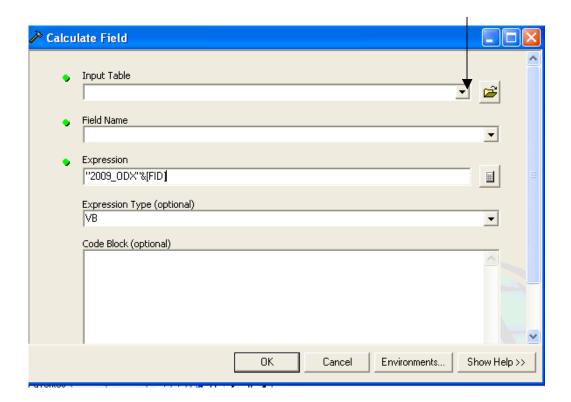
Now in the ArcToolbox select 'Fields' then double-click 'Calculate Field'.



In the Calculate Field box under 'Input Table' click the down-arrow and select the shape file Masterarcsite 2009.

Under 'Field Name' click the down-arrow and select ODX\_ID\_09 which should be at the end of the list of attributes.

Then in the 'Expression' input box type exactly: "2009\_ODX"&[FID] Make sure you include the quotation marks and square brackets as shown.



#### Calculate Field Troubleshooting

If you get any error messages during this process, feel free to try again as many times as necessary as chances are you have just typed the 'Expression' field incorrectly.

Sometimes fields do not assign for some unknown reason and there are no error messages. You will discover this when you check the attribute table (see the next step below). If after two tries following all the instructions in step 10 (including the clear selected features part) and you are sure you have written the expression correctly (get someone else to check your work), then go into the attribute table and highlight all the new sites without 2009\_ODX numbers (use the Shift or Ctrl buttons to select multiple entries) and then try again, this time <u>without</u> clicking the 'clear selected features button'.

### 11. Check the Masterarcsite\_2009 Attribute Table

Open the Attribute Table. To do this <u>right-click</u> Masterarcsite\_2009 on the left-hand column of layers in ArcGIS. Select 'Open Attribute Table'.

Use the scroll tool at the bottom of the box to go to the last column which is labeled ODX\_ID\_09. Scroll to the bottom of the table where the most recent site additions will be. These should now have a 2009\_ODX#. If they do not, see the troubleshooting guide above.

Take note of the last 2009 ODX number as you will need this information soon.

REA	DENS_EST1	DENS_EST2	DENS_EST3	DENS_EST_F	ODX_ID_09
0	0	0	0	0	2008_ODX5044
0	0	0	0	0	2008_ODX5015
0	0	0	0	0	2008_ODX5016
0	0	0	0	0	2008_ODX5017
0	0	0	0	0	2008_ODX2305
0	0	0	0	0	2008_ODX2306
0	0	0	0	0	2008_ODX2307
0	0	0	0	0	2008_ODX2308
0	0	0	0	0	2008_ODX419
0	0	0	0	0	2008_ODX420
0	0	0	0	0	2008_ODX541
0	0	0	0	0	2008_ODX542
0	0	0	0	0	2008_ODX421
0	0	0	0	0	2008_ODX422
0	0	0	0	0	2008_ODX423
0	0	0	0	0	2008_ODX424
0	0	0	0	0	2008_ODX7
0	0	0	0	0	2008_ODX8
0	0	0	0	0	2008_ODX1419

#### 12. Backup the Data

Minimize ArcGIS. On the desktop on the left hand corner click '3. Backup Data - Syncback'.

This will open up the Syncback program which backs-up the masterarcsite and mastertracklog data.

Plug in the external hard-drive. Then double-click the 'Backup' profile. After a minute or two another window will appear. Click 'Continue Run'. Once the result column in the window says 'Success' with a green tick symbol you can close Syncback and safely eject the external Hard-drive.

### 13. Send David Gifford zipped Daily Backup Files

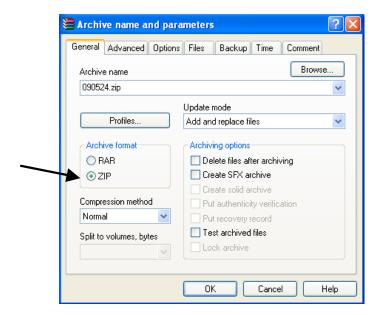
Click '2. Daily Backup'. Double-click the day's folder



(eg 090524). Now go into each of the folders corresponding to the nomads and recons.

Delete the sat photo in each file: sml\_overall.ecw.sid from each of the folders. Right-click on each nomad or recon folder and select 'Add to Archive'.

Under Archive Format select ZIP. Now Click OK.



Once you have created a ZIP file for each handheld folder in the Daily Backup right-click each one. Select 'Send To' then 'Mail Recipient'.

This will create an email where you can send each zip files separately to David Gifford. David's email should come up automatically as soon as you start typing his name. Otherwise it is: david.gifford@bhpbilliton.com Change the subject of each email to something like 'ODX archaeology backup'.

# 14. Update the ODX Master Survey Record Excel File

Click 5. Update ODX Master Survey Record. Fill out an entry for the day. This is where you'll need to remember how many sites were recorded. This year everything will be recorded in 'Detailed' form. So there should be zero sites recorded in Broadbrush



YOU ARE NOW DONE! Time to upload new maps for tomorrow's survey (see relevant manual).