

Canberra Bushwalking Club Advanced GPS and Digital Mapping Presentation

2 July 2008

Hardware Used

- Windows laptop
- Magellan Meridian GPS (around 4 years old)
- Data cable.

Software Used

- OziExplorer mapping application
- GTrax shareware for KML conversion
- Google Earth to check going.

Data Used

- Digital maps
 1. Topoview Raster 2006. Current release NSW topographic maps – mainly 2nd edition 1:25000, some 1:100000 out west. The product also has a seamless mosaic of all of NSW and non-current maps (eg. 1st edition 1:25000 maps around the ACT, handy for checking out old fire trails)
 2. ACT Special 1:250000
 3. Others eg. 1:50000 maps
 4. Scanned maps eg. From Tasmania. Any map can be scanned and calibrated for use with OziExplorer.
- Height data – Geoscience Australia 9sec DEM data.

Planning a Walk

1. Draw the proposed track and save it
2. Set waypoints with descriptions and save them
3. Create a Route Card by
 - Summing the proposed track distances between waypoints (if the distance between waypoints was used, this is only a straight line distance)
 - Record the magnetic bearing between waypoints
 - Check the track profile for ups and downs
 - Check the going from map, non-current map, Google Earth
4. Download waypoints to GPS and save them.

IMPORTANT – Understand what it all means.

Executing the Walk

1. Leave GPS running to record actual track
2. Set waypoints at significant features

3. Navigate using map and compass and route card. Use GPS for confirmation/emergency
4. Sweat or shiver, puff and pant, try not to cuss.

After the Walk

1. Upload actual track from GPS and save
2. Compare with planned track
3. Upload waypoints from GPS and save. Tidy them up
4. View actual track profile
5. Relive the joy and pain and navigational embarrassments
6. Use GExtrax to convert waypoints and track to KML. Use Google Earth to display and save as KMZ file.

Blog

Blog at <http://jevans.pcug.org.au> contains trip reports, pictures, KMZ files, audio podcasts, map fragments, bagging lists, links to other useful sites, things that amuse and interest me.

That's it, folks. Thanks. John Evans